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ABSTRACT

This document is a compilation of information about the more than 375 federal programs for postsecondary education--administered by about 23 government departments or agencies and supported by nearly $9.3 billion in 1972 federal expenditures. This directory is organized by alphabetical arrangement of federal departments and then of federal agencies. Within each section, the descriptions of programs are arranged alphabetically by program title. Within each description, there are nine elements: program name and administering agency; authorizing legislation; authorization, obligation, and expenditure figures; program objectives and operations; eligible applicants; primary beneficiaries; available program data; federal evaluation/studies; and information sources. (MJM)

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A COMPILATION OF FEDERAL PROGRAMS FINANCING POSTSECONDARY EDUCATION

By Pamela Christoffel

A Staff Report

THE NATIONAL COMMISSION
ON THE FINANCING OF
POSTSECONDARY EDUCATION

December 1973

This document was prepared by the staff of the National Commission and does not necessarily reflect the views or recommendations of the Commission.

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INTRODUCTION

This document is a compilation of information about the more than 375 federal programs for postsecondary education--administered by about twenty-three government departments or agencies and supported by nearly $9.3 billion in 1972 federal expenditures. This directory is the work of staff members for the National Commission on the Financing of Postsecondary Education (NCFPE), established by the Congress in the Education Amendments of 1972 (Public Law 92-318, Section 140). The material presented in this report was incorporated in the data base used by the Commissioners in developing their final report and recommendations.*

This directory should prove useful to policy makers in the Congress, the executive branch, and elsewhere (such as in Development Offices on campuses across the country), for there is no other such compilation of postsecondary education programs available today. First, there is neither a federal department nor a congressional committee that studies postsecondary education across agency lines. The Office of Management and Budget (OMB) examines the federal budget agency by agency; and it maintains no files by programs that involve more than one agency. The Federal Interagency Committee on Education (FICE) has published books on single programs; but it has so far not published a comprehensive analysis of the administration of all programs involving several agencies. And Congress' committees are organized along the same lines as the executive branch; for example, the Appropriations Committees oversee the federal budget by agency rather than by subject matter.

Second, the 1972 Catalog of Federal Domestic Assistance, published by the Office of Management and Budget, lists all federal programs by agency, so that readers must winnow out postsecondary education programs from the rest. This NCFPE directory goes beyond the OMB catalog by listing federal programs on postsecondary education only; by describing in more detail the number of participants in each program; by providing data, by program, on the expenditure, as well as the obligation, of funds; and by including a special section called

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*For the Commissioners' findings and recommendations to Congress and the President, see Financing Postsecondary Education in the United States (Washington, D.C.: Government Printing Office, January 1974).

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"Federal Evaluation." The Department of Health, Education and Welfare publishes HEW: Catalog of Assistance; but this document merely excerpts portions from the OMB Catalog. Likewise, to meet its Congressional mandate to provide information on education programs, the Office of Education publishes a document, the Catalog of Federal Education Assistance Programs, that also lifts portions of the OMB Catalog.

These analyses of programs agency by agency do not lend themselves to locating duplication and contradictions among agency efforts to administer and finance postsecondary education programs. Between July and November 1973, the NCFPE staff compiled a directory that would make such an attempt easier.

In designing this directory of federal programs for postsecondary education, NCFPE staff members first sought to define "program" broadly. Their definition encompassed federal payments to one beneficiary (such as payments to Howard University) and other systems not usually called "programs." To assemble a list of programs reportedly financing postsecondary education, the staff used the 1972 OMB Catalog of Federal Domestic Assistance.

To provide comparable data across all financing levels, the Commission focussed on expenditures. Since the OMB Catalog primarily contained data on obligations, staff members then contacted each federal agency on their list to get up-to-date information on expenditures. The latest year for which accurate fiscal (expenditure and impact data) were available in many federal agencies was 1972.

Excluded from the NCFPE staff list were those programs that, in Fiscal Year 1972: (1) obligated or expended no funds; (2) had no participants; or (3) were offered by federal departments solely to their own employees (like certain Department of Defense and civil service training programs). In only one instance did an agency have to be excluded from the directory because it did not provide NCFPE staff members any data at all.

After arranging data and descriptions from the agencies and the OMB Catalog in a standard format, the staff members sent their work to the agencies for review. Errors were then corrected, comments were taken into consideration, and the final descriptions were assembled. The agencies reviewed this material, but, the staff takes full and final responsibility for the contents of this report.

This directory is organized by alphabetical arrangement of federal departments (Sections 3 through 14) and then of federal agencies (Sections 15 through 25). Within each section, the descriptions of programs are arranged alphabetically by program title. (Readers should check the program name Index at the end of this compilation if they are unsure of the agency administering a program specifically of interest to them.) Within each description, there are nine elements:

1. Program Name and Administering Agency:

In general, the programs listed in this report are identified by their 1972 OMB Catalog title and number. However, in some cases, the agencies requested that a modified name be used instead. In addition, for clarity and because of limited data availability, a few small programs were combined, although they appear as separate entries in the Catalog. The entries in the NCFPE directory also incorporate those administrative changes reported to the staff as of September 1973. Since administering agencies change titles and even responsibilities from time to time, directory users may find a different agency in charge of a program during other fiscal years.

2. Authorizing legislation:

The legislative authority for each program listed in this part of the format is taken essentially verbatim from the 1972 OMB Catalog.

3. Authorization, Obligation, and Expenditure Figures:

Authorization figures are defined in the enabling legislation for the FY 1972 operations of each program. Often, enabling legislation sets the maximum limits authorized by Congress; then Congress' Appropriations Committees determine what portions of the money may be spent. In some cases, the law authorizing a program may read "such sums as necessary" or may remain silent about maximum levels of financing. In other cases, the federal postsecondary education program may be a segment of an authorization for a variety of programs that are not necessarily education-related. These kinds of cases are explained in the NCFPE directory's footnotes.

Obligation figures represent those funds that the agency promised to spend during FY 1972 or succeeding fiscal years. Several problems emerged as staff members sought to establish these figures:

(1) Because the federal budgeting and reporting systems are complex, fiscal information about many different programs was difficult to obtain in a standard format;

(2) In some programs, an aggregate amount was obligated (and/or expended) by both secondary schools and postsecondary institutions; and

(3) In some instances, funds were obligated (and/or expended) for non-educational activities, groups, or organizations as part of the same program that authorizes or obligates money for postsecondary education. For example, science research funds from a single program may be split between research universities and private consulting or business firms.

In such cases, the staff, wherever possible, identified the postsecondary education portion of the aggregate amounts.

Expenditure figures represent those funds actually spent during FY 1972, regardless of the year in which the funds were authorized, appropriated, or obligated. Readers are cautioned that (1) the expenditure figures represent the agencies' "best estimates" of their FY 1972 expenditures; and (2) the obligation figures in this directory are not usually directly comparable with the expenditure figures, because they frequently apply to different fiscal years.

4. Program Objectives and Operations:

The explanation of program objectives and operations contains the OMB 1972 Catalog summary modified by the revisions and expansions provided to the staff by some agencies.

5. Eligible Applicants:

Also derived from the Catalog, this section briefly outlines the individuals and institutions eligible to participate in each program. Readers seeking further details about eligibility and application procedures are directed to the OMB Catalog or to the administering agency.

6. Primary Beneficiaries:

This section briefly describes which organizations or individuals are likely or current beneficiaries of the program.

7. Available Program Data:

Information about program participants, both institutions and students, is provided here, along with a sketch of the program's focus during FY 1972. The details available vary widely, for they come from the administering agency's own descriptions of operations and activities, or from the agency's unanalyzed computer printouts, unpublished memoranda, "best estimates," or materials, inspected by NCFPE staff members, in rows of agency file drawers. Again, in some cases, it was difficult to separate participant data when programs supported both educational as well as non-educational groups and organizations at the same time. The reader is alerted that participation data corresponds more closely to obligation rather than expenditure information; analyses mixing obligation and expenditure information should be avoided.

8. Federal Evaluations/Studies:

This portion of the format abstracts only selected program evaluations or studies completed or sponsored by the federal government. In general, federal studies completed prior to 1968 were not included here. Additional studies have been published, for example, by the National Institutes of Health, which were not able to be incorporated in this directory. In some cases, especially in the area of health programs, the staff relied on abstracts of federal studies.

Wherever a study covers several programs, this directory usually describes it fully in the first relevant program and simply makes reference to it in the evaluation sections of the other relevant programs.

For further information on available federal studies, researchers should check with the Office of Planning and Evaluation for each agency.

9. Information Sources:

The published sources used for each program description are keyed by number to the full bibliography at the end of the volume. Unpublished sources--telephone conversations, interviews, and agency correspondence with Commission staff members--are not listed. But such data were verified through each agency's review of the staff's written descriptions.

Beyond the directory, the Commission's data base makes certain items readily available to researchers at computer terminals. These items from the directory include the name of the program, the administering agency, obligations and expenditures (but not authorizations), as well as codes identifying programs by financing mechanisms (the means of assistance and the recipient) and Commission objectives.

The information provided in this report, however, is certainly not definitive in the sense that it deals with FY 1972. Elements of each program change from year to year. Two aspects of governmental structure play a strong role in such changes: Congressional authorizations and appropriations for postsecondary education shift each year; and the governmental agencies responsible for administering the funds change or redefine their operations, titles, and responsibilities from time to time. Other researchers, it is hoped, will extend this study to other fiscal years to continue this attempt to study the financing of postsecondary education programs across agency lines.

While awaiting further research in this important area of policy management, the staff of the National Commission on the Financing of Postsecondary Education hopes that this directory will be a useful tool for understanding the wide scope of federal postsecondary education programs and the broad dispersal of their administration.

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DEPARTMENT OF AGRICULTURE

BASIC AND APPLIED RESEARCH (10.001)

Federal Agency:

Agriculture: Agricultural Research Service

Authorizing Legislation:

Research and Marketing Act of 1946, as amended; 7 U.S.C. 427i and 1624; P.L. 85-934; 42 U.S.C. 1891-1893; P.L. 89-106; 79 Stat. 431

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$3,143,726(a)	$6,915,000

Program Objectives and Operations:

To make agricultural research discoveries, evaluate alternative ways of attaining goals, and provide scientific technical information.

Eligible Applicants:

Institutions of higher education or nonprofit organizations whose primary purpose is conducting scientific research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72 a total of 30 grants ($1,980,439 obligated) and 30 contracts ($1,163,287 obligated) were made under this program.

Federal Evaluations/Studies:

No overall evaluations of this research program have been made. However, an advisory committee, appointed by the Division of Biology and Agriculture, National Research Council, National Academy of Sciences, undertook an examination formally supported by the Department of Agriculture and issued a report in 1972.

(a) In addition, P.L. 480 funds are available for agricultural research, mainly at foreign institutions. These funds, made available in certain foreign countries due to American sales of agricultural products, are not dollars but are foreign currencies. In equivalent U.S. dollars, obligations for this activity in FY 72 amounted to $6,699,064. Expenditures for FY 72 were $6,221,000. Costs in U.S. dollars to administer these P.L. 480 funds were $550,000 (salaries and expenses obligations), with approximately 85 percent of these funds actually expended. These costs were charged to regular appropriations in U.S. dollars.

Most committee members were faculty members from large universities who represented relevant disciplines. The committee's duties were: (1) to examine and evaluate the quality of science in agricultural research; (2) to ascertain gaps in agricultural research and make recommendations thereupon; (3) to discover the extent to which scientists in the basic disciplines relate their research to agriculture; and (4) to ascertain the extent to which agricultural scientists contribute to basic science. The committee studied several program areas and organizational structures of agricultural research in both the State Agricultural Experiment Stations (SAES) and the U.S. Department of Agriculture (USDA).

Positive findings by the committee included recognition of many programs of excellence in terms of scientific quality and mission. Many well-trained, highly motivated scientists were identified. Also praised were organizational changes designed to cope with new problems and new administrative policies that foster good research.

On the negative side, the committee felt the need to expose and discuss several areas where they believed agricultural research is "outmoded, pedestrian, and inefficient, and bold moves are called for in reshaping administrative philosophies and organizations, in establishing goals and missions, in training and management of research scientists, and in allocations of resources."(b)

The committee found that: (1) in the allocation of resources for agricultural research, inadequate support was given to the basic sciences; (2) the agricultural research establishment had an excessive number of field laboratories, and (3) these laboratories had a low level of coordination and integration of research by SAES and USDA.

In the area of management of scientists, the committee found evidence of ineptness, with direct impact on research quality. Restriction of decision-making powers and freedom of movement of the scientists were found to be results of administrative structures and policies which are believed to have repressive effects on the quality of science.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

1, 29.

(b)National Academy of Sciences, National Academy of Engineering, Report of the Committee on Research Advisory to the U.S. Department of Agriculture (Washington, D.C.: National Academy of Sciences, 1972), p. 11.

CONTRACTS AND GRANTS FOR SCIENTIFIC RESEARCH (10.200)

Federal Agency:

Agriculture: Cooperative State Research Service

Authorizing Legislation:

Section 2 of P.L. 89-106; 7 U.S.C. 450i

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$12,500,000	$14,221,237

Program Objectives and Operations:

To support basic and applied research to further the programs of the Department of Agriculture. Areas of study are primarily cotton and soy beans, livestock, plant proteins, and human development. There is no matching requirement, but cost sharing is generally practiced.

Eligible Applicants:

Usually state agricultural experiment stations, forestry schools eligible under the Morrill Act of 1962, and land-grant colleges established under the Morrill Act of 1890.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Within the contracts and grants for scientific research, there are two areas of aid. The first area consists of funds made available to black land-grant institutions. In FY 72, $8,883,000 was obligated for the 17 such institutions which provided programs in various agricultural fields. For example, Tuskegee Institute ran several programs of: (1) sweet potato breeding, production, and utilization; (2) small fruits breeding, production, and utilization; (3) mechanism of weed seed dormancy, its control and practical application; (4) mushroom feasibility; and (5) a study of some factors associated with nutrition-related diseases among low-income rural families. Fort Valley State College undertook programs to study: (1) animal production efficiency and improved utilization of agricultural by-products; (2) reducing environmental pollution from plant and animal wastes and agricultural chemicals; (3) high cash value crops for limited resource farmers in Georgia; and (4) developing human resources and raising living standards in Georgia through rural development.

The second area within the program consists of $3,617,000 earmarked by Congress for research in soybeans, cotton, and pesticides. In addition, rural development centers and alternative animal waste pretreatment-land disposal systems are provided for in the program.

Federal Evaluations/Studies:

There have been no national program evaluations of the contracts and grants for scientific research.

COOPERATIVE FORESTRY RESEARCH (10.202)

Federal Agency:

Agriculture: Cooperative State Research Service

Authorizing Legislation:

Cooperative Forestry Research Act of October 10, 1962; P.L. 87-788;
16 U.S.C. 582a-582a-7

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$4,672,000	$4,715,162

Program Objectives and Operations:

To encourage and assist the states in carrying on a program of forestry research at forestry schools.

Funds are appropriated by Congress for distribution to state institutions certified as eligible by a state representative appointed by the governor of each state. Grants are apportioned among states by the Secretary of Agriculture after consultation with a national advisory board of at least seven of the state-certified forestry schools.

Eligible Applicants:

Eligible state institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Sixty-four certified state institutions participate in the McIntire-Stennis Cooperative Forestry Research Program. Three are located in the territories of Guam, Puerto Rico, and the Virgin Islands; and the remaining 61 are located in the several states. There is considerable functional as well as geographical variation; for example, an agricultural experiment station at Auburn University, a school of forestry at Northern Arizona University, an institute of food and agricultural sciences at the University of Florida, and a school of forestry at the University of Montana.

The total number of projects in this program was 535 in FY 72. The numbers of scientists and graduate students participating in FY 72 were 575 and 494, respectively.

Federal Evaluations/Studies:

No national evaluations have been made of the Cooperative Forestry Research Program.

PAYMENTS TO AGRICULTURAL EXPERIMENT STATIONS (10.203)

Federal Agency:

Agriculture: Cooperative State Research Service

Authorizing Legislation:

Hatch Act of 1887 as amended by the Act of August 11, 1955; P.L. 84-352; 7 U.S.C. 361a - 361i

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$63,205,711	$62,813,597

Program Objectives and Operations:

To support agricultural research at state agricultural experiment stations established in accordance with the Act of July 2, 1862. The purpose is to promote efficient production, marketing, distribution, and utilization of products of the farm as essential to human health and welfare and to promote a sound, prosperous agricultural life. Funds are appropriated by Congress for distribution to states in accordance with the statutory formula in the Act.

Eligible Applicants:

Agricultural experiment stations established in accordance with the Act approved July 2, 1862.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Agricultural Experiment Station program has several goals: (1) to insure a stable and productive agriculture for the future through wise management of natural resources; (2) to protect forests, crops, and livestock from insects, diseases, and other hazards; (3) to produce an adequate supply of farm and forest products at decreasing real costs; (4) to improve efficiency in the marketing system; and (5) to protect consumer health and improve nutrition and well-being of the American people.

The Agricultural Experiment Stations program is active in the following areas: (1) soil and land; (2) vegetables; (3) fruits, nuts; and (4) dairy cattle. The following problem areas received most attention in FY 72: (1) toxic residue in food and food protection from toxins; (2) adjustment to change; (3) alleviation of pollution; (4) wild life and fish ecology; and (5) ornament and turf development.

There are a total of 53 State Agricultural Experiment Stations, with one in each of the 50 states and Puerto Rico and two in both New York and Connecticut.

Federal Evaluations/Studies:

While not directly relating to this program, the National Academy of Science Report of the Committee on Research Advisory to the U.S. Department of Agriculture (also known as the "Pound Report"), which studied the Agricultural Research Service's programs, may provide insight. The report is described on p. 2.

COOPERATIVE EXTENSION SERVICE (10.500)

Federal Agency:

Agriculture: Extension Service

Authorizing Legislation:

Smith-Lever Act as amended, 7 U.S.C. 341-349; Agriculture Marketing Act of 1946, 7 U.S.C. 1623-1624; Rural Development Act of 1972

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$171,172,000	$169,811,000

Program Objectives and Operations:

To provide educational programs based on local needs in the broad fields of (1) agricultural production and marketing, (2) rural development, and (3) home economics.

Grants are available to state land grant institutions on a formula basis for approved projects, with different legislative acts requiring different matching formulas. Extension work is financed by federal, state, and county governments.

Eligible Applicants:

Designated land grant institutions in the state. State Extension Services prepare state plans of work and budgets and forward plans to the Extension Service in the Department of Agriculture.

Primary Beneficiaries:

Programs of state and county Extension Services available to general public: educational and technical assistance to farmers, producers, marketing firms, community organizations, homemakers, and youth.

Available Program Data:

There are several areas under the jurisdiction of the Cooperative Extension Service. More than two-fifths of all professional personnel employed by the Service in June 1972 worked in programs on agriculture and natural resources. Agricultural programs dealt with the following areas: (1) environmental improvement; (2) improving performance of commodity production and marketing; (3) helping farmers and agriculture-related business adjust to change; (4) improving the use and management of natural resources; and (5) more effective insect, pest, and disease management.

A second basic area of the Cooperative Extension Service is home economics, which provides education to improve the quality of living for families at all levels of society, especially low-income families, racial minorities, the handicapped, the elderly, and youth. National leadership is provided on program management, subject matter, organization, and methods of family-related education. More than 860,000 volunteer leaders assist Extension home economists in helping an estimated 16.5 million families to improve the quality of their nutrition and family life.

In the area of agricultural production and marketing, cotton is one example of a program to improve farm income. A special Extension appropriation of $500,000 earmarked for expanded work to increase production of quality cotton was initiated in FY 72. Other areas in which Extension seeks to improve farm income include soybeans, wheat, sheep, swine, potatoes, and foreign trade. One project uses agricultural program aides to assist low-income farmers. The pest management program works primarily in cotton, but potatoes, alfalfa, sweet corn, and others are included, in order to develop a pest control program which is scientifically, economically, and environmentally sound.

Marketing programs of the Cooperative Extension Service are conducted with producers, marketing firms, and household consumers. Research programs have been established and implemented in many regions of the country depending on the needs of the communities.

The total number of projects under the Cooperative Extension Service is unavailable from the Department of Agriculture.

Federal Evaluations/Studies:

There have been no national evaluations of the Cooperative Extension Service. However, states have evaluated projects in their states.

FORESTRY COOPERATIVE RESEARCH (RESEARCH COOPERATIVE AID) (10.651)

Federal Agency:

Agriculture: Forest Service

Authorizing Legislation:

McSweeny-McNary Forest Research Act of May 22, 1928 (45 Stat. 699) as amended and supplemented; 16 U.S.C. 581a-i

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable[a]	$1,630,748	$1,631,000

Program Objectives and Operations:

To extend the research activities of the Forest Service by sharing costs for basic and applied research with institutions of higher education. Cooperative aid agreements, prepared jointly by a principal investigator and a forest service investigator, are used to research timber, watershed, forest range, and wildlife management as well as forest recreation, forest fire protection, forest engineering, and forest insect and disease protection and control.

Eligible Applicants:

Nonprofit institutions and organizations, state agricultural experiment stations, profitmaking institutions, organizations, and individuals conducting scientific research.

Primary Beneficiaries:

Investigators and research assistants, and ultimately, the general public.

Available Program Data:

In FY 72, under the McSweeny-McNary Act (also referred to as the Whitten Act): (1) $1,114,288 was awarded to 129 land grant institutions; (2) $460,545 was given to 58 non-land grant institutions; and (3) $55,915 was awarded to seven noneducational-type grantees. There was a total of 194 awards. Funds are used in such areas as watershed management, timber management, wildlife habitat management, fire and atmosphere science, recreation research, and forest product utilization.

Federal Evaluations/Studies:

There have been no national studies evaluating this research program.

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[a] Budgeted as a part of direct support.

FORESTRY RESEARCH (10.652)

Federal Agency:

Agriculture: Forest Service

Authorizing Legislation:

Basic Research Grants: P.L. 85-934; 42 U.S.C. 1891-1893; Basic and Applied Research Grants: P.L. 89-106, Section 2; 7 U.S.C. 450b; 79 Stat. 431

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not available [a]	$1,057,967	$1,058,000

Program Objectives and Operations:

To make grants for basic research to nonprofit institutions or organizations and grants for basic or applied research to profit or nonprofit institutions or organizations.

Eligible Applicants:

Nonprofit institutions or organizations with the primary purpose of conducting scientific research, or state agricultural stations, nonprofit institutions or organizations, profitmaking organizations or individuals, or other federal organizations.

Primary Beneficiaries:

Investigators and research assistants, and ultimately the general public.

Available Program Data:

In FY 72, under the authorization of Public Law 85-934 the following funds were spent for basic research: (1) $592,745 was awarded to 16 land grant institutions; (2) $177,764 was given to seven non-land grant institutions; and (3) $287,458 was awarded to three noneducational-type grantees. Funds were used in such areas as watershed management, timber management, wildlife habitat management, fire and atmosphere science, recreation research, and forest product utilization. No funds were spent for basic and applied research grants (P.L. 89-106) in FY 72.

Federal Evaluations/Studies:

There have been no national studies evaluating the Forestry Research Program.

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[a] Budgeted as a part of direct support.

DEPARTMENT OF COMMERCE

IMPORTATION OF DUTY-FREE EDUCATIONAL AND SCIENTIFIC MATERIALS (11.201)

Federal Agency:

Commerce: Domestic and International Business Administration, Special Imports Division

Authorizing Legislation:

19 U.S.C. 1202; "Tariff Schedules of the United States," Schedule 8, part 4, head note 6

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	(a)

Program Objectives and Operations:

To process applications for duty-free treatment of certain instruments and apparatus intended for the use of a nonprofit public or private institution established for educational or scientific purposes. Duty-free entry of scientific or educational instruments is permitted only if no scientific equivalent for the applicant's specific purposes is manufactured in the U.S.

Eligible Applicants:

Public and private nonprofit institutions established for scientific or educational purposes.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, 715 applications were received for the importation of duty-free materials and instruments, of which 368 were approved, 130 were denied, and 217 returned because informational deficiencies precluded the Department from making the required scientific equivalency test(s).

Federal Evaluations/Studies:

No evaluations have been done concerning the use or success of the program.

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[a] Authorization, obligation, and expenditure figures do not apply, since the only outlays of money for this program are salaries and expenses, including funds transferred to the National Bureau of Standards for advisory services. No data, such as the amount of duty saved by institutions, are available, as Bureau officials are not permitted to compare the prices of the instruments and materials that are judged.

ECONOMIC DEVELOPMENT - GRANTS FOR PUBLIC WORKS AND DEVELOPMENT FACILITIES (11.300)

Federal Agency:

Commerce: Economic Development Administration

Authorizing Legislation:

Public Works and Economic Development Act of 1965; P.L. 89-136 as amended by P.L. 90-103, 91-123, 91-304, and 92-65; 42 U.S.C. 3131, 3135, 3141, 3161, 3171

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,020,000,000(a)	$11, 807,139	$3,253,038(b)

Program Objectives and Operations:

To assist in the construction of public facilities needed to initiate and encourage long-term economic growth in designated areas where economic growth is lagging behind the rest of the nation.

Grants are made for up to 50 percent of the cost of the development and construction of public works. Additional assistance is also available in the form of loans or, in more severely depressed areas, supplemental grants. Public works include vocational schools, as well as improvement, expension, or construction of public facilities, including related machinery and equipment. Grants are given solely to organizations in officially designated areas and may be used only to improve public works that directly or indirectly improve opportunities for the successful establishment of industrial and commercial enterprises, in accordance with the overall development plan for the area.

Eligible Applicants:

States, or local subdivisions thereof, Indian tribes, and private or public nonprofit organizations representing a redevelopment area or a designated economic development center are eligible to receive grants.

(a) The authorization is for all construction projects funded through money available under the Public Works and Economic Development Act of 1965.

(b) The expenditure figure is the amount spent in FY 72 of the $11,807,139 awarded in grants that year for the construction of postsecondary schools. This amount does not include funds awarded in previous years but not spent until FY 72.

Primary Beneficiaries:

The underemployed and unemployed of the economically depressed region.

Available Program Data:

Title I funds (construction funds available through the Public Works and Economic Development Act of 1965) to the amount of $11,887,139 were granted for the construction of 18 vocational-technical schools in economically depressed areas throughout the nation during FY 72. The average amount of the grant awarded in that year was approximately $656,000.

Federal Evaluations/Studies:

No overall evaluations of this program for funding the construction of post-secondary schools have been done.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

43.

U.S. MERCHANT MARINE ACADEMY, KINGS POINT (11.507)

Federal Agency:

Commerce: Maritime Administration

Authorizing Legislation:

Kings Point Permanency Act; P.L. 84-415; Sec. 2(G)(1) of the Merchant Marine Act of 1936; 46 U.S.C. 1126

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$7,602,000	$7,599,000	$8,235,000 (a)

Program Objectives and Operations:

To train merchant marine officers, the government maintains at Kings Point, New York, a four-year accredited institution for such marine instruction. Tuition and quarters are free, and each midshipman receives a four-year $1,500 allowance (in the form of a personal account) for clothing, equipment, and miscellaneous expenses. Graduates reveive a B.S. and a U.S. Coast Guard merchant marine license.

Eligible Applicants:

Male U.S. citizens between 17 and 22 years old who are high school graduates.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Academy offers three major curricula: (1) nautical science, for future deck officers; (2) marine engineering, for the preparation of engineering officers; and (3) a dual license curriculum which leads to a license in each. All three curricula require the same basic program for the first year. One-half of both the second and third years is spent at sea, with each midshipman being assigned according to his chosen curriculum (dual license majors divide their time between two departments). The senior year is devoted to electives for all majors (such as foreign languages or anthropology) to further in-depth study in the chosen field, and to preparation for the written Coast Guard licensing examination. In FY 72, 211 passed this examination and graduated from the Academy as merchant marine officers. More specific information concerning the Academy is in the U.S. Merchant Marine Academy

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(a) Expenditure figure includes some funds authorized in FY 71 but not actually spent until FY 72.

Catalogue. Detailed data (available only for the period 1949-1969) such as the cost per graduate or the maritime industry employment rate for Kings Point graduates is available in the appendices to the report on merchant marine officer training noted below. Comparable data for the state marine academies is available from the same source.

Federal Evaluations/Studies:

In 1969, the Special Subcommittee on Maritime Education and Training of the House of Representatives Committee on Merchant Marine and Fisheries requested a review of all merchant marine training in America, whether at the U.S. Merchant Marine Academy at Kings Point, at the state marine academies, or at union schools. After study of the situation, the Maritime Administration submitted a report entitled Merchant Marine Officer Training. The report dealt mainly with questions of supply and demand. It concluded that if merchant marine training continued at the current rate, there would be a considerable surplus of officers by the late 1970's. To prevent this situation, the report recommended (1) that federal support, and consequently officer supply, be reduced and more directly related to demand; and (2) that training become more diversified to include more technological instruction and the study of less traditional subjects such as advanced oceanography. The report predicted that the future demand of the maritime industry would require such new sorts of training.

The report further recommended that primary federal support be given to the National Academy to fulfill the projected demand for more diversely and highly trained personnel, as the Kings Point institution had better facilities and could be more directly controlled by the federal government. The quality of the state schools was found by the study to vary greatly; only two of the six were accredited as of 1971 (the U.S. Merchant Marine Academy is fully accredited), and only the curriculum of the New York State Academy was described as comparable in quality to that available at Kings Point.

As a consequence of the recommendations of the 1970 Report to the Subcommittee, limits were set on the number of student grants to the state institutions, and enrollment levels at the National Academy were maintained at the same level. A follow-up report, written and released by the Maritime Administration in April, 1972, and entitled The Second Round Analysis, reiterated the recommendations for more technically oriented and diversified officer training, to be carried out mainly through the Kings Point facilities. This report further predicted a rapid convergence of supply and demand in the period 1973-1976.

No further evaluations dealing directly with the quality or success of merchant marine training, either at Kings Point or the state academies, are available. However, The Second Round Analysis recommended that "further in-depth study. . .

be undertaken during 1974"(b) when the President's Merchant Marine program has been more fully implemented.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

44, 45, 46, 47.

(b) U.S. Department of Commerce, Maritime Administration, The Second Round Analysis of Future Merchant Marine Officer Supply and Demand, April, 1972 (Washington, D.C.: Government Printing Office, 1972), p. 4.

STATE MARINE SCHOOLS (11.506)

Federal Agency:

Commerce: Maritime Administration

Authorizing Legislation:

Maritime Academy Act of 1958; P.L. 85-672; 46 U.S.C. 1381

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$2,200,000	$2,189,000	$2,230,000

Program Objectives and Operations:

To train merchant marine officers in state marine schools.

The Secretary of Commerce assists each of the six state maritime schools (located in Maine, Massachusetts, New York, Texas, California, and Michigan) through (1) $75,000 in funds for the maintenance and support of the school; (2) $50 per month student allowance payments for each student; and (3) the loan of federally owned vessels to be used for training purposes (all operational costs financed by the states). The federal government has no direct control over the academies except to require that graduates be licensable by the Coast Guard.

Eligible Applicants:

Any of the six recognized state maritime academies.

Primary Beneficiaries:

Academies and students attending these institutions.

Available Program Data:

In FY 72, 355 persons graduated from the state academies as U.S. merchant marine officers. This number is expected to decrease in FY 73, partially as a result of limits set by the federal government on the number of student grants available, as shown below for each state:

Massachusetts--77
New York--251
California--110
Great Lakes--50
Texas--35
Maine--150

Federal aid in FY 72 included $915,000 for student allowance payments, $801,000 for maintenance costs, and $450,000 in the form of general purpose grants. Further data such as the cost per student per year may be found in the appendices to the report on merchant marine officer training submitted to the House Committee on Merchant Marine and Fisheries, February 1970.

General information on the schools and the standards of each are available from the various schools.

Federal Evaluations/Studies:

Only partial studies are available as part of the Merchant Marine Officer Training report and The Second Round Analysis Report. These reports are discussed on p. 20.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

45.

SEA GRANT SUPPORT (THE NATIONAL SEA GRANT PROGRAM) (11.417)

Federal Agency:

Commerce: National Oceanic and Atmospheric Administration, Office of Sea Grant

Authorizing Legislation:

National Sea Grant College and Program Act of 1966; P.L. 89-688 and 89-454, 33 U.S.C. 1122-1124; Reorganization Plan Act 1970

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$25,000,000	$17,600,000	$16,700,000

Program Objectives and Operations:

To support establishment of major university centers for marine research, education, training, and advisory services, and individual investigations having limited objectives in the same activities.

Grants may be given to finance specific short-range projects or to initiate more extensive cooperative projects; in the latter case, Sea Grant Support is usually reduced after the project has become established (typically after two years). Other grants are given as support to institutions that have shown a continued commitment to Sea Grant goals over a period of years. Those universities (as of 12/72, University of Hawaii, Oregon State University, University of Rhode Island, Texas A & M University, University of Washington, and University of Wisconsin) which are officially designated Sea Grant Colleges received first consideration in the award of grants.

Grants may provide up to two-thirds of necessary project funds, and may be used for any expenses except to rent, construct, or purchase ships or facilities.

Eligible Applicants:

Schools of higher learning, private and public agencies or institutes, and business concerns that have shown the capability to serve the state or region in marine affairs.

Primary Beneficiaries:

Organizations and individuals with a professional interest in marine affairs.

Available Program Data:

In FY 72, 62 institutions located throughout the nation received assistance ranging from $1,000 research grants to $1,700,000 support grants to Sea Grant colleges, for a wide range of projects that included studies in aquaculture, geological oceanography, ocean law, behavioral science, pollution (oil spills, pesticides, thermal, and radioactive), course development, and public education. A complete list of all Sea Grant Support for FY 72, including a description of each project and the size of the grant, is available as a computer print-out from the Office of Sea Grant.

Federal Evaluations/Studies:

No overall evaluation studies have been done of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

39, 48,49.

DEPARTMENT OF DEFENSE

CIVIL DEFENSE--ARCHITECT ENGINEER DEVELOPMENT PROGRAMS FOR FACULTY, PROFESSIONALS, AND STUDENTS (12,300, 12.301, 12.324)

Federal Agency:

Defense: Defense Civil Preparedness Agency, Architectural and Engineering Development Division

Authorizing Legislation:

Federal Civil Defense Act of 1950 as amended, Subsection 201; P.L. 81-921; 50 U.S.C. App. 2281, 2251-2297

	FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Faculty:	$70,000	$29,763(a)	$27,750(a)
Professional:	$70,000	$65,415(a)	$65,415(a)
Student:	$30,000	$27,750(a)	$27,750(a)

Program Objectives and Operations:

For faculty, to develop the capability of architectural and engineering professors to conduct courses; for professionals, to develop the capability to incorporate fallout shelters into new structures; for students, to develop the ability to determine what degree of protection structures provide. Faculty, professionals, and students learn nuclear defense techniques either by attending courses at specified government locations or summer institutes or by receiving instruction from traveling government teams who conduct courses at universities throughout the nation.

Eligible Applicants:

Faculty--recognized engineering or architecture faculty members from accredited colleges or universities; professionals--must have a bachelor's degree (or equivalent) in architecture or engineering or a license to practice as a professional; students--must be U.S. citizens, have completed at least one year of an engineering or architecture program in a university or technical school, and qualify as an engineering or science aide through the U.S. Civil Service Commission summer employment exam or by Grade Point Average. (See the U.S. Civil Service Announcement for further details.)

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) All funds obligated and spent were used for salaries and expenses.

Available Program Data:

In FY 72, 35 faculty members received training at the summer institute program, and 400 students received training under the Student Development Program. For FY 73, personnel at the Architectural and Engineering Development Division expect to train approximately 100 faculty members at the summer institute program and 600 professionals at classes conducted at various universities throughout the nation.

Federal Evaluations/Studies:

No overall evaluations have been done of these programs.

CIVIL DEFENSE--EDUCATION (PERSONAL AND FAMILY SURVIVAL) (12.323)

Federal Agency:

Defense: Defense Civil Preparedness Agency, Training and Education Development Division

Authorizing Legislation:

Federal Civil Defense Act of 1950 (amended); P.L. 81-920; 50 U.S.C. 2251-2297

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,900,000	$1,763,056 (a)	$1,763,056 (a)

Program Objectives and Operations:

To use established state and local educational resources to incorporate disaster preparedness and survival information in the curricula of public and private schools, and to assist school districts in preparing disaster plans.

Groups or agencies sponsor courses that are taught in the local community and open to the general public. The federal government funds such local projects 100 percent and provides the necessary materials and qualified instructors. Resources are also used to train adults as radiological monitors and shelter managers.

Eligible Applicants:

State and local government agencies, school systems, and individuals.

Primary Beneficiaries:

Individuals and the local community.

Available Program Data:

In FY 72, 597,507 individuals were trained at various places throughout the country: 580,743 in personal and family survival, including 537,870 high school students; 3,169 in shelter management; and 13,595 in radiological monitoring. The postsecondary part of this program, in which 59,637 adults were trained, is being gradually phased out. Primary emphasis is now placed on training high school students.

(a) Figures include funds spent on training for secondary as well as postsecondary education. Program officials report that postsecondary costs for this program are not separable.

Federal Evaluations/Studies:

No overall evaluation studies have been done.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

50.

CIVIL DEFENSE--STAFF COLLEGE(a)

Federal Agency:

Defense: Defense Civil Preparedness Agency, DCPA Staff College, Battle Creek, Michigan

Authorizing Legislation:

Federal Civil Defense Act of 1950, as amended, subsection 201-3; P.L. 81-920, as amended; P.L. 85-606; 50 U.S.C., App. 2281

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$200,000	$176,263	$176,263

Program Objectives and Operations:

To train key government officials, educators, industrial managers, planners, and others concerned with civil preparedness. These individuals stay at the Staff College in Battle Creek, Michigan (without charge) and receive instruction in civil preparedness techniques and skills. Courses vary in length from 1.5 to 14 days.

Eligible Applicants:

Civil defense directors/coordinators, instructional program coordinators, civil preparedness officials, or others holding leadership positions in government and industry.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 1,716 individuals received training at the Staff College. Of this total, 292 local or state leaders or instructors (under contract to the Office of Civil Defense) participated in the Career Development program which is given over a period of weeks. Additionally, 295 persons received instructions for shorter periods through courses such as Civil Defense Management, Planning and Operations, or Radiological Defense. The remaining 1,129 persons attended conferences or special seminars.

Also in FY 72, almost 5,000 individuals completed one of the two DCPA Staff College home-study courses on civil preparedness.

(a) This program is included in the listing for the Staff College--Student Expense Program (p.34) in the OMB Catalog, but is separated in this compilation for clarity.

Federal Evaluations/Studies:

No overall evaluations have been done on this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

50.

CIVIL DEFENSE--STAFF COLLEGE STUDENT EXPENSE PROGRAM (12.314)

Federal Agency:

Defense: Defense Civil Preparedness Agency, Training Support Staff, Staff College, Battle Creek, Michigan

Authorizing Legislation:

Federal Civil Defense Act of 1950 (amended), Section 201; P.L. 81-920 (amended); P.L. 85-606; 50 U.S.C. App. 2281

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$70,000	$34,503	$34,503

Program Objectives and Operations:

To encourage states and their political subdivisions to increase the effectiveness of their key civil preparedness personnel. The Defense Civil Preparedness Agency (DCPA) provides funds to reimburse students attending DCPA Staff College up to one-half their travel and per diem expenses.

Eligible Applicants:

Individuals assigned a civil preparedness position in local or state government.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 249 civil preparedness officials from areas throughout the nation received grants through the Student Expense Program, averaging about $140. A complete listing of these grants, by state, may be found in the DCPA's Annual Statistical Report (FY 72).

Federal Evaluations/Studies:

No overall evaluation studies have been done.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

50.

CIVIL DEFENSE--UNIVERSITY EXTENSION (12.320)

Federal Agency:

Defense: Defense Civil Preparedness Agency, Training and Education Development Division

Authorizing Legislation:

Federal Civil Defense Act of 1950 (amended), P.L. 81-920; 50 U.S.C. App. 2281

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$3,500,000	$3,557,024[a]	$3,557,024

Program Objectives and Operations:

To provide approved civil preparedness training for: (1) state and local government officials, (2) emergency staff members, and (3) instructors in specialized subject areas. Also, to provide effective leadership orientation in civil defense through conferences for state, county, and municipal officials and leaders of business and industry.

Extension divisions of land grant colleges and universities under contract with the Defense Civil Preparedness Agency (DCPA) conduct conferences for government officials, train instructors, give professional training courses in local communities, and hold educational conferences on civil preparedness for local leaders.

Eligible Applicants:

Selected land grant colleges and universities, usually one institution for each state.

Primary Beneficiaries:

State and local government officials, business and industrial leaders, educational personnel, and individuals with civil defense responsibilities.

Available Program Data:

In FY 72, 1,234 conferences or courses were conducted, and 35,154 participants certified at 54 institutions throughout the country. Courses given at various universities in FY 72 included Shelter Management Instructor, Shelter Manager, Radiological Monitoring Instructor, Radiological Monitoring, Radiological Defense Officer, Aerial Monitoring and Emergency Operation Simulation. A complete list of courses and conferences given at each institution (including the number of participants) is also available in the FY 72 Annual Statistical Report of the DCPA.

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[a] This figure includes supplemental funding.

Federal Evaluations/Studies:

No overall evaluation studies have been done.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

50.

MACHINE TOOL LOAN TO EDUCATIONAL INSTITUTIONS (12.001)

Federal Agency:

Defense: Defense Supply Agency; and General Services Administration

Authorizing Legislation:

P. L. 80-883

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$5,600,000[a]	\$5,600,000[a]	\$2,685,486[b]

Program Objectives and Operations:

To aid in the development of machine tool operators as a national defense pool of human resources.

Tools are loaned to institutions for training purposes. The recipient provides for transportation of equipment from storage in General Services Administration (GSA) warehouses and for installation and maintenance of equipment.

Eligible Applicants:

Both secondary and postsecondary nonprofit training institutions.

Primary Beneficiaries:

Students of such institutions.

Available Program Data:

During FY 72, the GSA entered into agreements with 53 schools for the loan of equipment valued at over \$5,600,000. Only 16 postsecondary schools[c] received aid; each such institution received an average loan of 19 pieces of equipment with an average loan value of \$167,818.

All loan applications in process as of 20 October 1972 were suspended. Defense Supply Agency officials report that the program is not currently operative.

Federal Evaluations/Studies:

No overall evaluations of this program have been completed.

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[a] Total acquisition cost of all tools loaned during FY 72.

[b] Total acquisition cost of tools loaned to postsecondary schools during FY 72.

[c] Vocational-technical schools that offered only training at the secondary level were not counted.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

41.

OFF-DUTY EDUCATION[a]

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

Continuing general provisions contained in the Department of Defense Annual Appropriations Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	\$30,650,000 PSE \$ 6,657,000[b]	\$30,650,000 PSE \$ 6,657,000[b]

Program Objectives and Operations:

To provide opportunity for personnel to further individual educational goals by off-duty educational programs. Provides up to 75% of tuition for military personnel taking accredited courses during their off-duty time.

Eligible Applicants:

Universities and colleges, institutions, and individuals

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72 there were approximately 204,000 participants in the off-duty programs from all the services.

Federal Evaluations/Studies:

There have been no published evaluations of this activity.

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[a] This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

[b] These are estimated funds provided by the individual military services representing monies obligated and expended for postsecondary education only.

OVERSEAS DEPENDENTS EDUCATION[a]

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

General provisions contained in the Department of Defense Annual Appropriation Act, Section 607

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	Unavailable	$122,120

Program Objectives and Operations:

To provide dependent children of Navy personnel opportunity to attend a junior college.

Eligible Applicants:

The Panama Canal Zone Junior College.

Primary Beneficiaries:

The students who attend this Junior College.

Available Program Data:

Funds from the Overseas Dependents Education program support a Junior College in the Panama Canal Zone. In FY 72, 71 dependents attended this school. Federal funds paid to the college cover tuition expenses of $1,720 per student; the remainder of tuition totaling about $200 was paid by the student.

Federal Evaluations/Studies:

There are no published evaluations of this activity.

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[a] This "program" was not included in the Office of Management and Budget's *1972 Catalog of Federal Domestic Assistance*.

PROFESSIONAL EDUCATION[a]

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

Continuing general provisions contained in the Department of Defense Annual Appropriations Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$526,609,000	$515,220,000

Program Objectives and Operations:

To provide training and education for career advancement in areas such as engineering, business and management, medicine, and military science. Non-commissioning programs provide the opportunity for selected enlisted personnel to obtain college degrees.

Eligible Applicants:

Military personnel.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 9,499 students supported through the Army entered civilian post-secondary schools. The Navy supported a total of 2,666 students in FY 72; these students were mostly graduate students. The Air Force supported a total of 2,400 postgraduate students, 300 undergraduate students, and 1,100 medical students.

Federal Evaluations/Studies:

There are no published evaluations of this program.

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[a] This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance. It includes education for military personnel in civilian colleges and universities only.

RESEARCH AND DEVELOPMENT(a)

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

P.L. 85-934; 45 U.S.C. 1891; P.L. 588; P.L. 604

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$432,635,770	$432,635,770

Program Objectives and Operations:

To provide for research in fields of interest to the military including weapons, equipment, methods, and techniques.

Eligible Applicants:

Institutions of higher education, nonprofit organizations, and U.S. government agencies.

Primary Beneficiaries:

The military

Available Program Data:

In FY 72, 194 postsecondary institutions received research and development grants of $10,000 or more, with a total of 788 grants distributed. Over 700 contract awards under $10,000 were also made to colleges and universities.

Federal Evaluations/Studies:

There have been no published evaluations of this Department of Defense activity.

(a) This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

RESERVE OFFICERS TRAINING CORPS (ROTC)(a)

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

National Defense Act, as amended; P.L. 88-147, 10 U.S.C. 3101, 2111

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$166,200,000(b)	$157,938,000(b)
	PSE $150,800,000(c)	PSE $101,484,000(c)

Program Objectives and Operations:

To commission and train officers, through a college campus program for the three branches of the armed services.

Eligible Applicants:

Public and private colleges and universities

Primary Beneficiaries:

The cadets

Available Program Data:

In FY 72, 83,033 students participated in the ROTC program. Almost half (38,000) received student support totaling $40,867,000. Black colleges received $4,438,000. There were 517 ROTC units stationed at 374 schools. ROTC was compulsory at 33 schools in FY 72.

Federal Evaluations/Studies:

There are no national program evaluations of this program.

(a) This "program" was not included in the Office Management and Budget's *1972 Catalog of Federal Domestic Assistance*.

(b) Includes funds for both secondary and postsecondary ROTC.

(c) Estimated funds for ROTC at the postsecondary level only.

SERVICE ACADEMIES(a)

Federal Agency:

Defense: Office of the Secretary

Authorizing Legislation:

National Defense Act, as amended; 10 U.S.C. 1041; 10 U.S.C. 6951-6974; 10 U.S.C. 4331-4355; 10 U.S.C. 9331-9355

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$189,300,000(b) PSE $ 73,757,000(c)	$207,801,000(b) PSE $ 83,120,400(c)

Program Objectives and Operations:

To provide a college education and train officer candidates for commissioning.

Eligible Applicants:

The Air Force, Army and Navy academies

Primary Beneficiaries:

The service academies and their students

Available Program Data:

In FY 72, an average of 4,005 cadets attended the United States Military Academy (Army service academy). A total of 4,202 cadets attended the Navy Academy in FY 72, and 3,915 students attended the Air Force Academy. Funds provided by the Department of Defense support the physical operations of these service academies as well as provide support to the students attending each of them.

Federal Evaluations/Studies:

Congress makes an annual report to the President on each academy. A recent book by K. Bruce Galloway and Robert Bowie Johnson, Jr., entitled West Point, is critical of the education of West Point cadets.

(a) This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(b) These figures represent estimated funds for military academic schools at all educational levels.

(c) These figures represent estimated funds for only the three service academies.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

18.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE (HEW)

AGING--SPECIAL SUPPORT PROJECTS (13.756)

Federal Agency:

HEW: Administration on Aging, Office of Human Development[a]

Authorizing Legislation:

Older Americans Act of 1965, Title III, as amended by P.L. 90-42, and P.L. 91-69; 42 U.S.C. 3021-3025

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$35,000,000	$29,565,000[b]	$11,492,000[b]

Program Objectives and Operations:

To provide assistance to states and community organizations for support of programs for the aged and aging.

Aid is made available according to a formula which matches grantee to federal funds to provide assistance to the aged in a variety of ways. Although primary focus of the program is to provide and coordinate services for the elderly, adult education courses and training programs for personnel involved with the aging and aged are also authorized to receive funds.

Eligible Applicants:

States and territories with approved state plans.

Primary Beneficiaries:

Personnel involved with the aged and aging as well as the elderly themselves.

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[a] From August 1967 until May 1973, the Administration on Aging was located in the Social and Rehabilitation Service.

[b] Obligation and expenditure figures are given for all services and projects conducted as part of the communities program under Title III of the Older Americans Act. Although training (both for the elderly and for personnel involved with the aged) is only one of many services offered through this program and is not offered as part of every grant project, only total figures were available, as SRS personnel reported that they have no means of estimating what proportion of those funds were used for educational or training purposes.

Available Program Data:

During FY 72, 1,470 projects were awarded grants under Title III (average award was $20,000), which provided services of various kinds for 2,525,000 aging or aged persons. Although no data are available concerning the number of persons receiving adult education, such courses were provided as part of the programs of 31 percent of the 1,470 projects active in that year. The average cost per person for such education was $4.33.

Also in FY 72, some 11 percent of the projects conducted training programs for persons involved with the elderly, in which 19,000 persons participated.

Personnel at the Administration on Aging report that presently and in the future, grant money will be awarded largely for projects that focus on the planning and coordination of services, rather than for projects whose primary goal is to provide the actual services.

Federal Evaluations/Studies:

An evaluation of Title III programs has recently been completed by Booz, Allen, and Hamilton Public Administration Services, Inc., under contract with the Social Rehabilitation Service. As of August 1973, the study was under review by the Administration on Aging, and no definite publication plans had been formulated.

MENTAL HEALTH--DIRECT GRANTS FOR SPECIAL PROJECTS (NARCOTIC ADDICTION AND DRUG ABUSE) (13.254)

Federal Agency:

HEW: Alcohol, Drug Abuse, and Mental Health Administration

Authorizing Legislation:

Alcoholic and Narcotic Addict Rehabilitation Amendments of 1968, Part B, Title III, P.L. 90-574; 42 U.S.C. 2681 et seq., as amended; Community Health Centers Amendments of 1970, Title III, P.L. 91-211; Comprehensive Drug Abuse Prevention and Control Act of 1970, Title I, P.L. 91-513

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$60,000,000(a)	$2,866,000(b)	$956,000

Program Objectives and Operations:

To prevent and control narcotic addiction and drug abuse. Development of specialized training programs and/or related materials; training personnel to operate, supervise, and administer services for the prevention and treatment of narcotic addiction, drug abuse, and drug dependence; surveys and field trials to evaluate adequacy of programs; demonstration of new and effective methods of delivery of services.

Eligible Applicants:

Public or nonprofit agencies or organizations with expertise in the appropriate area.

Primary Beneficiaries:

Narcotic addicts and drug-dependent persons.

Available Program Data:

Various programs around the country were administered with grants furnished under the Direct Grants for Special Projects program. The training target population of the program was made up of social workers, professionals, paraprofessionals, counselors, and clergy.

(a) This authorization is shared with Alcohol, and is applicable to several sections of Parts "C" and "D" of the Community Mental Health Centers Act.

(b) Does not include funds allocated or spent for surveys, field trials, or demonstrations of effective methods of delivery of services.

Two Career-Teacher Training Centers were also established, one at Baylor College of Medicine in Houston, Texas, and the other at SUNY-Downstate Medical Center in Brooklyn, New York. These centers provide a full range of substantive courses in the area of the addictions and serve as a central point for curriculum materials to be used at the career teachers' sponsoring institutions. Each center can accommodate between 10 to 15 career teachers per year.

Federal Evaluations/Studies:

No particular program evaluations were available.

MENTAL HEALTH FELLOWSHIPS (13.241)

Federal Agency:

HEW: Alcohol, Drug Abuse, and Mental Health Administration

Authorizing Legislation:

Public Health Service Act, Section 301, 433, P.L. 78-410; 42 U.S.C. 241 and 289c

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$8,846,720	$9,625,000

Program Objectives and Operations:

To provide training for research relating to the problems of mental illness and mental health and to raise the level of competence and to increase the number of individuals engaged in such research.

Predoctoral, postdoctoral, and special fellowships provide a stipend based on the individual's training and experience, dependency allowances where applicable, and other necessary expenses. An allowance is also made to the sponsoring institution to cover tuition and fees and other costs of research training. A research development award provides support for individuals with research potential who need additional training and/or experience in a productive research environment. Funds are available for salary support.

Eligible Applicants:

An applicant for a fellowship is considered to be the candidate. He must be sponsored by an institution with an adequate program and facilities for research training. Research development awards are made to appropriate research centers on behalf of individuals who need advanced training to realize research potentials.(a) The individual in all cases must be a citizen or national of the United States or have been lawfully admitted for permanent residence. Individuals must qualify by scholastic degree and previous training and/or experience for the level of support sought.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Beginning in FY 74, the Research Career Program is being funded under the Research Grant activity, p. 54.

Available Program Data:

The National Institute of Mental Health (NIMH) awarded 449 fellowships in FY 72. Of these, 369 were for predoctoral training, 64 for postdoctoral, and 38 for special training.

Federal Evaluations/Studies:

There have been no national evaluations of the Mental Health Fellowships program. According to NIMH, a follow-up study currently in process will provide information on the subsequent career activities of fellowship recipients.

MENTAL HEALTH--RESEARCH GRANTS (13.242)

Federal Agency:

HEW: Alcohol, Drug Abuse, and Mental Health Administration

Authorizing Legislation:

Public Health Service Act, Section 301/303, P.L. 78-410; 42 U.S.C. 241, 242, 242a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$83,793,000 PSE $67,853,000	$86,471,000 PSE $69,177,000

Program Objectives and Operations:

To develop new knowledge and approaches to the causes, diagnosis, treatment, control, and prevention of mental diseases through basic, clinical, and applied research, investigations, experiments, demonstrations, and studies. Areas of special interest include alcoholism, drug abuse, schizophrenia, depression, child mental health, crime and delinquency, minority mental health, and mental health of the aged. One of the research grant programs, entitled "Small Grants," provides support to develop and test techniques, to exploit an unexpected research opportunity, to analyze collected data, or to carry out exploratory studies.

Eligible Applicants:

Investigators affiliated with public or nonprofit private agencies, including state, local, or regional government agencies, universities, colleges, hospitals, and academic or research institutions, may apply for research grants. Small grants are intended for the younger, less experienced investigator, investigators in small colleges, and others who do not have regular research support or resources available for research exploration.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, 1,263 research awards were supported through funds distributed to universities and medical schools.

Federal Evaluations/Studies:

Work is being completed on an in-depth study, begun in 1973, of the research programs of the National Institute of Mental Health (NIMH), which is now a part of the Alcohol, Drug Abuse, and Mental Health Administration. This study was the responsibility of an NIMH Research Task Force which involved Institute staff and outside consultants in the review of various areas of mental health research such as psychological processes, mental illness, and social problems. Recommendations will be made for research program emphases and deemphases in various areas and mechanisms for carrying out program objectives.

MENTAL HEALTH TRAINING GRANTS AND CONTRACTS (13.244, 13.252)

Federal Agency:

HEW: Alcohol, Drug Abuse, and Mental Health Administration

Authorizing Legislation:

Public Health Service Act, Sections 301, 303, and 433, P.L. 78-410; 40 U.S.C. 241, 242a, and 289c

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$111,974,000	$114,874,000
$60,000,000 (a)	$ 772,000 (b)	$ 788,000 (b)

Program Objectives and Operations:

To increase the number and improve the quality of people working in the areas of mental health and mental illness by training professionals for clinical service, teaching, and research; and by continuing education for existing mental health manpower. High priority is given to experimental and innovative training projects; training projects which develop new kinds of mental health workers; and projects in the specialized areas of alcoholism, narcotic addiction, and drug abuse, minority studies, crime and delinquency, and metropolitan problems.

Eligible Applicants:

Training grants are awarded to public or private nonprofit institutions for training in psychiatry, psychology, social work, and other areas relevant to mental health, and in the specialized areas of high priority and need (alcoholism, drug abuse, etc.).

Primary Beneficiaries:

Trainee stipends may be awarded only to citizens or nationals of the United States, or to persons lawfully admitted for permanent residence. Individuals seeking trainee stipend support must apply directly to and be accepted by the training institution.

(a) This authorization is shared with Drug Abuse and is applicable to several sections of Parts "C" and "D" of the Community Mental Health Centers Act.

(b) These amounts are normally reported under #13.252 of the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

Available Program Data:

For FY 72 the National Institute of Mental Health (NIMH), which is now part of the Alcohol, Drug Abuse, and Mental Health Administration, awarded 1,900 training grants, which included 122 awards in the specialized areas of alcoholism, crime and delinquency, minority studies, drug abuse, and metropolitan problems. The 1,900 training grants provided stipends for more than 11,000 trainees.

In the drug abuse area, contracts were utilized to establish six special training centers to meet the urgent treatment manpower needs of the present. These centers provide courses in drug abuse subjects to health professionals, educators, law enforcement personnel, narcotic addiction treatment personnel, and community leaders. Individuals trained at these centers are now involved with programs ranging from narcotic addiction rehabilitation facilities to community action prevention projects. Training programs are also arranged for the armed forces. The centers in California, Oklahoma, and Connecticut provide up to two-week courses of general orientation to the field of drug abuse and methods of prevention for persons involved with drug abuse programs or students who have an academic interest in this field. The centers in Illinois and Florida provide training to NIMH grantees involved in treatment and rehabilitation programs, and the one in New York is open to persons working in New York treatment and rehabilitation programs. Each center has its own specific programs and requirements.

In addition, a residential National Drug Abuse Training Center has been established at Marjorie Webster College, Washington, D.C., to provide elementary and advanced training for persons who work or plan to work as health or social service personnel in treatment and rehabilitation programs or as educational or community personnel in local prevention programs. Training includes field experiences in various drug abuse prevention and treatment agencies in the Washington, D.C., and Maryland metropolitan areas. Included in the program are courses for federal, state, and local elected officials, business leaders, community leaders, professional and paraprofessional personnel who desire in-depth learning experiences, and courses to train personnel to deal with the root causes of drug abuse. The National Center will also be involved in establishing standards for training programs and evaluating and validating new training program designs.

Federal Evaluations/Studies:

A survey completed in 1966 investigated the career status of mental health personnel supported under NIMH training grants, including the nature of professional activity, geopgraphic distribution and mobility, type of employing organization or work setting, fields of specialization, and other characteristics.

A recent study which evaluates Mental Health Training Grants is entitled An Overview of NIMH-Supported Departments and Individuals, done by the Bureau of Social Science Research in 1972.

According to the evaluation abstract, this study considers the effect of actual or possible changes in funding mechanisms on the recipients. The purpose of the study was to obtain preliminary data for later in-depth analyses of NIMH funding commitments in training and research. The objectives were twofold: (1) to describe the current utilization of NIMH graduate training support of institutions, departments, and individuals; and (2) to assess the impact of possible or actual changes in funding mechanisms upon the institutions, their faculties, programs, and students.

Information was obtained in several ways: (1) by retrospect and hypothetical questions aimed at supported institutions;[c] (2) by surveys of "comparison" groups of unsupported elements; and (3) by a survey of undergraduate students drawn from a population defined as likely candidates for future support. Specifically, these surveys solicited opinions on anticipated acceptability and utilization of loans as a mechanism for the financing of graduate and postgraduate training.

The survey was divided into two categories: (1) a departmental survey and (2) surveys of individual recipients. For the former, departmental questionnaires were sent in the Spring of 1971 to 1,035 departments in medical schools and 550 departments in graduate schools which had received support from NIMH or the National Institutes of Health (NIH). Concerning surveys to individual recipients, the student-trainee questionnaire was directed to predoctoral and postdoctoral students and trainees in departments receiving funds from NIH and/or NIMH training grants and fellowships. A sample of institutions was drawn from the total universe of supported academic institutions and a campus coordinator was responsible for the identification of study subjects and the distribution and collection of questionnaires. Stratification criterion in the selection of campus-coordinated institutions was the number of NIH/NIMH supported trainees and fellows. In medical schools, questionniares were sent to student trainees who had already received a first professional degree. Ninety-one percent of the campus-coordinated institutions returned student-trainee questionnaires, providing about 9,000 questionniares. By weighting the data, projections to the total study population were provided.

Major findings here were divided into departmental and student-trainee surveys. In the departmental survey there are several pertinent sections related to questions in the survey. One such section deals with measurements pertaining to faculty members and student-trainees; another provides measurements of the programs within the support programs. The major part of the latter dealt with budgetary matters: (1) sources and amounts of revenues and expenditures for departments in medical and graduate schools; (2) trends in NIMH support over a period of time; (3) the potential impact of training fund reductions; and (4) responses given by the chairmen of NIMH-supported medical and graduate schools.

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[c] Applies to individuals, departments, hospital units, research institutes or centers, laboratories, or any other kind of training center receiving funds from the above-defined sources during October, 1970. The term "unsupported" applies to individuals or units who did not receive such support.

It was the consensus of medical and graduate school chairmen that the NIH and NIMH support's major impact was in improving or expanding research and training programs. Relatively large majorities of both medical and graduate school chairmen also agreed that the programs had major impact in attracting better-qualified students, training better academicians, and contributing to science. Medical and graduate school chairmen indicated satisfaction with the existing system of awarding NIH/NIMH training grants and fellowships. Respondents generally favored federal support to departments on a national competitive basis. One-half of the department heads in graduate schools (but one-third those in medical schools) favored increased support for students and trainees under research grants.

In the student-trainee survey there are several sections of data: (1) demographic and academic background, (2) financial data, and (3) loans. The study found that the average NIMH respondent is an American citizen in his late twenties and a full-time trainee in his second year of a doctoral program in either psychology or social science, expecting to attain his doctorate in less than three years. Sources of major support for both undergraduate and postgraduate student training were parental support and employment. Stipend support becomes important in graduate or professional school. Although the average NIMH trainee does not use loans as a major source during his educational career, he does borrow, most often through educational loans, to supplement his budget. The average student owed between $1,500 and $2,000 at the time of the study.

There were no major recommendations made from this study, as its main purpose was to provide a preliminary data base for future in-depth analyses of NIMH training and research funding.

Another survey currently in process will update information obtained in earlier studies and will provide additional information on the subsequent career patterns of NIMH trainees.

DISEASE CONTROL--LABORATORY IMPROVEMENT (13.201)

Federal Agency:

HEW: Center for Disease Control

Authorizing Legislation:

Public Health Service Act, as amended, sec. 301, 311, 318, 352, and 353

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$7,869,000(a)	$7,707,000(a)

Program Objectives and Operations:

To provide a comprehensive national laboratory improvement program through research for improving and standardizing laboratory methodology and through evaluating techniques, materials, equipment, kits, and reagents used in public health laboratories. The program also provides for upgrading the performance of clinical laboratories engaged in interstate commerce.

Eligible Applicants:

State and local public health laboratories. Licensing applies to clinical laboratories engaged in interstate commerce.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The National Laboratory Improvement program conducts research and development activities for evaluation, standardization, and increased proficiency of laboratory methodology. A national reference laboratory service is provided in the disciplines of bacteriology, mycology, virology, parasitology, clinical chemistry, hematology, and pathology.

In FY 72, a total of 15 states were involved jointly in the presentation of courses of laboratory training. The number of students involved in that year was 1,850.

(a) These amounts represent total funds which were obligated and expended for this program category. Costs for training only are not available, but comprised a small percentage of the total.

Federal Evaluations/Studies:

A study entitled Evaluation Report on the Effectiveness of the Clinical Laboratories Improvement Program was done by the National Center for Disease Control (CDC) (with a subcontract to American Society of Medical Technologists to conduct a census of laboratories). According to the study abstract, the basic purpose was to assess the effectiveness of 1967 Clinical Laboratory Improvement Act (CLIA) program which, as of July 1969, provided for federal, state and professional regulation, and improvement of laboratory performance. The study was to evaluate extensively every aspect of the Act and its implementation as well as to develop a comprehensive quantitative data base relating to the completeness of CLIA coverage and licensure across the nation.

Data for this evaluation study was obtained from a review of all licensing applications made to the CDC.

Several recommendations were suggested by the evaluation. One was that a system of state improvement programs be implemented, funded by federal allocations. Assignment and definitions of the program in each state were to be controlled by the CDC. Implying an operational, if not an organizational merger of the laboratory component of Medicare quality regulation with the CDC program, the requirements for proficiency testing by Medicare were to be extended to all independent laboratories and correlated with the CDC program.

Another evaluation which has direct bearing on the Laboratory Improvement Program is the Clinical Laboratory Performance Analysis Using Proficiency Test Statistics. This study was done under the direction of Peter Finkel of the National Bureau of Standards in 1972 for HEW.

Some of the study's major goals were to: (1) evaluate the temporal effect of continued participation in the CDC proficiency testing program; (2) describe the population of licensed (interstate) laboratories in terms of various profile descriptions; and (3) contrast the relative performance of licensed and volunteer laboratories. The data for the analyses were: (1) the results of proficiency tests administered by CDC, extending for a two-year period beginning in July 1969; and (2) various profile descriptors of the laboratories licensed under this program (i.e., the number of full time employees, the highest academic achievement of the working supervisors, and the total number of accreditation or licensure programs in which the laboratory was involved).

The statistical analysis of clinical laboratory performance made several major observations, and found several important trends. The study found the variability among licensed and voluntary laboratories had decreased over the two year period under study, indicating that the group performance has become more consistent. Four independent variables were used: (1) accreditation; (2) state program intensity; (3) supervisory education; and (4) analytical method/laboratories. Only the last variable appeared to be significant with regard to performance.

The evaluation concluded that almost every proficiency testing program measured the capability of participating laboratories instead of their routine level of performance. Factors such as scoring methods and interconvertibility among methods are known to affect measured performance in proficiency testing programs. The study recommended greater standardization among the major testing programs. The study also noted that proficiency testing is only one aspect of a broad based quality assurance program, and that there must also be well trained laboratory personnel, fresh reagents, standard solutions of high quality, and timely feed-back to the laboratory.

A third evaluation related to the Laboratory Improvement Program is titled Organizational and Physical Facilities Alternatives of Distributive Laboratories. This study was recently completed by the Food and Drug Administration and will soon be available.

DISEASE CONTROL--NUTRITION (13.248)

Federal Agency:

HEW: Center for Disease Control

Authorizing Legislation:

Public Health Service Act, sec. 301, 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,810,143(a) PSE $ 338,689(b)	$2,560,170(a) PSE $ 338,689(b)

Program Objectives and Operations:

To plan, develop, and coordinate nutrition activities directed towards the achievement of national health goals. Assistance can be used to develop means for overcoming nutrition and health problems that are prevalent in the United States. Further use and use restrictions are determined by specific contract objectives, scope of work, and negotiated budget.

Eligible Applicants:

Community agencies, public and private health organizations, universities and other institutions with competence in nutrition education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, five projects in nutrition and health were initiated by contracts with the following universities: the University of California (Los Angeles), the Harvard University School of Public Health, the Massachusetts Institute of Technology, the University of Michigan, and the University of Rhode Island. The rest of the grants went to community agencies and health departments.

(a) These amounts represent total funds which were obligated and expended for the total program category.

(b) Funds for contracts with universities.

Federal Evaluations/Studies:

A nutrition assessment survey was undertaken by HEW beginning in 1968. The Nutrition Program was given the responsibility for carrying out a survey to determine the magnitude and location of malnutrition and related health problems in this country.

A series of ad hoc committees organized by Dr. Arnold Schaefer, Chief of the Nutrition Program, developed an overall plan for conducting such a survey. These committees recommended that emphasis be placed on obtaining information from the low income segment of the population.

Because of the constraints of time and money, the survey was limited to ten states: Washington, California, Texas, Louisiana, South Carolina, Kentucky, West Virginia, Michigan, Massachusetts, and New York (including a separate survey of New York City). Although the primary interest in each state was malnutrition among the poor, the population sampled did not include all of this lower income group within a state, nor was it restricted to only the poor. The study makes careful note that the population studied was not representative of the entire population within a county or state, and that the survey findings cannot be extrapolated and applied to the overall population of the states from which samples were drawn.

A common protocol was developed by the Nutrition Program in consultation with various expert committees. In each state a group was identified--the state health department, or a university medical school department--who recruited a survey team and conducted the survey. The Nutrition Program provided consultation, technical assistance, monitoring, and analysis of data.

The largest percentage of persons in the sample was white, the next largest percentage was black, and the smallest percentage was Spanish-American. The latter group included two different populations: Puerto Ricans and Mexican Americans. Income status was another important characteristic considered as well as sex and age.

The results of the Nutrition Survey indicated that a significant proportion of the population surveyed was malnourished or was at high risk of developing nutritional problems. However, malnutrition in different segments of the population varied in severity and in regard to the specific nutrients involved. An example of this variation was the high prevalence of low vitamin A values among Mexican Americans in the low-income ratio states, as contrasted to the absence of vitamin A problems in Puerto Ricans in the high-income ratio states, primarily in New York City. The findings show that the characteristics of malnutrition are often unique to the local situation and to the specific subsegment of the population being surveyed. Nutritional solutions to the different types of malnutrition encountered will vary among different segments of the population having different social, cultural, and economic characteristics.

In this survey, evidence of malnutrition was found most commonly among blacks, less commonly among Spanish-Americans, and least among whites.

Generally, there was increasing evidence of malnutrition as income level decreased within each ethnic group; nutritional deficiencies were often more prevalent in the low income states than in the high income ratio states. The study's findings indicate that although income is a major determinant of nutritional status, other factors such as social, cultural, and geographic differences also have an effect on the level of nutrition of a population group.

DISEASE CONTROL--RESEARCH GRANTS (13.202)

Federal Agency:

HEW: Center for Disease Control

Authorizing Legislation:

Public Health Service Act, as amended, sec. 301

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,144,000(a)	$2,604,000(a)

Program Objectives and Operations:

To encourage research concerned with communicable and other transmissible diseases by providing funds to support identified projects designed to establish, discover, develop, elucidate, or confirm information on underlying mechanisms relating to these diseases and their prevention, detection, and control.

Project sharing is normally expected to be at least five percent.

Eligible Applicants:

Any individual, public or private nonprofit institution or agency qualified by scientific or other relevant competence to carry out the proposed project.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The research grants program was designed to complement the research activities of the Center for Disease Control. For FY 72, there were a total of 68 active research grants in a total of 26 states. California had the greatest number of active grants with a total of 12 while New York had a total of seven active grants. Further information concerning the grantees was unavailable. The program has recently been phased out and records are now kept in a central records center.

Federal Evaluations/Studies:

There have been no national evaluations completed of this program.

(a)These amounts represent total funds which were obligated and expended for this program. Costs for training only are not available, but comprised a small percentage of the total.

DISEASE CONTROL--TRAINING PUBLIC HEALTH WORKERS (13.203)

Federal Agency:

HEW: Center for Disease Control

Authorizing Legislation:

Public Health Service Act, as amended, sec. 311; 42 U.S.C. 243

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$1,823,455(a)	\$1,783,339(a)

Program Objectives and Operations:

To assist the states in developing and improving their own training programs in the area of preventive disease control. To provide training and various other services which are not available to health groups through their own resources.

Although there are no matching requirements as such, the participating states are required to furnish training space and equipment and to provide the cost for local speakers when courses are conducted within a state.

Eligible Applicants:

State and community health departments. Trainees must function in a capacity relevant to the training being offered.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, a total of 6,445 students participated in the Training of Public Health Workers Program in 51 states nationwide.

Federal Evaluations/Studies:

There have been no national evaluations done on this program.

(a)These amounts represent total funds which were obligated and expended for the total program category. Cost for training activities alone are not available.

DISEASE CONTROL--TUBERCULOSIS (13.204)

Federal Agency:

HEW: Center for Disease Control

Authorizing Legislation:

Public Health Service Act, as amended, sec. 301 and 311; 42 U.S.C. 241 and 243

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$3,829,000(a) PSE \$ 125,000	\$3,829,000(a) PSE \$ 125,000

Program Objectives and Operations:

To provide leadership and coordination of a joint national, state, and local effort to bring about a massive reduction in tuberculosis (TB).

Eligible Applicants:

State and local health departments, and individuals or organizations involved with TB control.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 170 agencies and institutions in 42 states, including medical schools, received funds for training TB control workers. Support was provided to seven Clinical Associates to stimulate academic and clinical instruction in pulmonary diseases in medical schools.

Federal Evaluations/Studies:

No national evaluation of this program has been undertaken, but an extensive system of ongoing evaluation, based on specific effectiveness criteria, has been developed to evaluate TB control programs.

(a)These amounts represent total funds which were obligated and expended for the total program category.

OCCUPATIONAL SAFETY AND HEALTH DEMONSTRATION GRANTS (13.265)

Federal Agency:

HEW: Center for Disease Control, National Institute for Occupational Safety and Health

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301 and 311; Occupational Safety and Health Act of 1970, Sec. 20, P.L. 91-506; 42 U.S.C. 246

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	(a)

Program Objectives and Operations:

To support pilot or full-scale activities demonstrating technical and economic feasibility or application of new or improved occupational safety and health procedures, methods, techniques, or systems. The program also supports comprehensive examination of present occupational safety and health conditions in any health system, subsystem, or industry which can lead to a demonstration.

Grant funds are available for costs directly attributed to the demonstration plus certain indirect costs incurred by the institution conducting the demonstration project. There are no matching requirements for demonstrations.

Eligible Applicants:

Public and private nonprofit institutions or agencies.

Primary Beneficiaries:

Applicant institutions or agencies and persons endangered by occupational hazards.

Available Program Data:

There was only one demonstration grant active in FY 72. This was the Occupational Health Services in Small Industries project run by the

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(a) Funds for this program are included with Occupational Health Research Grants, p. 71, according to the National Institute for Occupational Safety and Health. In FY 73, the functional activities supported under this demonstration grant program were subsumed by the research grant program.

Brookdale Hospital Center and is directed towards defining the need, scope, and nature of occupational health services required for small industries. There were no new demonstration grants funded in FY 72 nor was the Occupational Health Services in Small Industries actually funded in FY 72.

Federal Evaluations/Studies:

There have been no national studies completed evaluating the Occupational Safety and Health Demonstration Grants program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

97.

OCCUPATIONAL SAFETY AND HEALTH RESEARCH GRANTS (13.262)

Federal Agency:

HEW: Center for Disease Control, National Institute for Occupational Safety and Health

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301 and 311, 42 U.S.C. 246; Coal Mine Health and Safety Act of 1969, Sec. 502a, P.L. 91-173; Occupational Safety and Health Act of 1970, Sec. 20a (1), P.L. 91-596

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,435,583 PSE $ 389,693(a)	$2,513,589 PSE $ 402,174(a)

Program Objectives and Operations:

To eliminate or control factors in the work environment which are harmful to health.

Funds are available for costs directly attributed to the performance of the research plus certain indirect costs of the institution or agency in accordance with established policies of the Public Health Service.

Eligible Applicants:

Any public or private nonprofit institution or agency capable of conducting research in the field of occupational health.

Primary Beneficiaries:

Research institutions and agencies as well as workers subject to occupational hazards.

Available Program Data:

There were a total of 72 research grants in FY 72. These grants were awarded to 52 grantee institutions of which approximately 37 were higher education colleges and universities. Examples of research grants include Coal Workers Pneumoconiosis (Occupational and Respiratory), Behavioral and Motivational Factors, and Toxicology and Pathology.

(a) This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

There have been no national studies done evaluating the Occupational Health and Safety Research Grants program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

97.

OCCUPATIONAL SAFETY AND HEALTH TRAINING GRANTS (13.263)

Federal Agency:

HEW: Center for Disease Control, National Institute for Occupational Safety and Health

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301 and 311, 42 U.S.C. 242 D and G; Coal Mine Health and Safety Act of 1969, Sec. 502(a), P.L. 91-173; Occupational Safety and Health Act of 1970, Sec. 21, P.L. 91-596

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,684,417	$1,202,682

Program Objectives and Operations:

To develop specialized professional personnel in occupational safety and health problems with training in solution techniques.

Funds are available for direct costs of the program, plus certain indirect costs of the institution or agency, determined by the Public Health Service. Amounts of stipends and other details are in accordance with Public Health Service policy.

Eligible Applicants:

Any public or private nonprofit institution or agency involved in training at technical, professional, or graduate level.

Primary Beneficiaries:

Trainees who are admissible to the grantee institution and have interests in occupational safety and health training.

Available Program Data:

There were a total of 21 training grants in FY 72 at institutions of higher education. Although all of the programs are related to the occupational safety and health, the grants display some variety. For example, the University of California at Berkeley has a program in environmental health, while the University of Cincinnati has one in industrial psychiatry and North Carolina State University has a program in systems safety engineering.

Federal Evaluations/Studies:

There are no national evaluations which pertain to this extramural program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

98.

FOOD RESEARCH TRAINING GRANTS (13.104)

Federal Agency:

HEW: Food and Drug Administration, Bureau of Food

Authorizing Legislation:

Public Health Service Act, Section 309(a); 42 U.S.C. 242g

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$216,000	(b)

Program Objectives and Operations:

To assist nonprofit institutions to train students at master's and doctoral levels in research techniques relevant to food science and technology.

Grants provide institutional support through funds that may be used for the expenses of approved training (salaries of personnel, supplies, equipment, and training-related travel), and for the stipends, fees, and tuition of students enrolled in such programs.

Eligible Applicants:

Colleges and universities having schools or departments of food science and technology or closely related types of training.

Primary Beneficiaries:

Students involved in food science or technology programs at participating universities or colleges. Students apply to the institution in which they are enrolled for fellowships.

Available Program Data:

In FY 72, in addition to three ongoing training projects funded in previous years, the Food and Drug Administration (FDA) awarded $216,000 in new grants ranging in amount from approximately $3,000 to $47,000. These grants were made to seven universities located in various parts of the country to fund training programs in such fields of study as environmental engineering and foods, food chemistry, microbiology, engineering, food protection, and toxicology.

(a) Funds for training granted by the Bureau of Food are available from a total authorization for the FDA.

(b) See note b, p. 77.

Federal Evaluations/Studies:

No overall evaluation of this training program has been made.

PRODUCT SAFETY AND FOOD RESEARCH GRANTS (13.101, 13.103)

Federal Agency:

HEW: Food and Drug Administration, Bureau of Food

Authorizing Legislation:

Public Health Service Act, Section 301(d); 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$2,052,000	$4,568,000[b]

Program Objectives and Operations:

To establish, expand, and improve research activities related to the control of hazardous products or substances in the home, and the control of foodborne illnesses which may affect the safety of the nation's food supply.

Funds are granted to institutions to be used for the necessary expenses of approved research, such as salaries of professional and nonprofessional personnel, supplies, research-related travel and equipment, and publication costs.

Eligible Applicants:

Colleges, universities, and other nonprofit institutions conducting or planning research of the approved types.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

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[a] Funds for research granted by the Bureau of Food are available from the total authorization for the Food and Drug Administration (FDA).

[b] The FDA budget office reports that expenditures for research and training projects are not compiled separately by program. The figure given here represents total expenditures for the five research and training programs administered by the Bureau of Food and the Bureau of Radiological Health. These programs are described on pp. 75, 77, 79, 81.

The budget office further states that funds for colleges and universities are not compiled separately from other funds.

Available Program Data:

Approximately 50 universities received research grants in FY 72 ranging in amount from $3,000 to more than $125,000.(c) More than four-fifths of all funds obligated in FY 72 funded food research. Research grants personnel report that the product safety research program, which had obligations of less than $400,000 in FY 72, has since been discontinued.

Federal Evaluations/Studies:

No overall evaluations of these research programs have been undertaken.

(c) In addition, five nonprofit agencies or institutions (i.e., not post-secondary institutions) received grants in FY 72. Funds going to such institutions, however, represented only 8.9 percent of the total amount awarded in that year.

RADIOLOGICAL HEALTH RESEARCH GRANTS (13.105)

Federal Agency:

HEW: Food and Drug Administration, Bureau of Radiological Health

Authorizing Legislation:

Public Health Service Act, as amended, especially sections 301 and 311; P.L. 89-749; Radiation Control for Health and Safety Act of 1968, P.L. 90-602; 42 U.S.C. 241, 243, 264

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
[a]	$1,000,000	[b]

Program Objectives and Operations:

To determine the extent and character of radiation problems and the processes by which radiation produces damage in human beings, to improve present techniques concerning radioactivity and dose-disease relationships, and to explore ionizing and nonionizing radiation hazards.

Grant funds provide for support for the direct-cost expenditures incident to research performance, plus allocable portions of indirect costs of the institutions.

Eligible Applicants:

Any public or private nonprofit institution, individual, or agency involved in conducting research germane to radiological health.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, the Bureau of Radiological Health funded 26 research projects conducted at 22 universities and colleges located throughout the nation. These examined such subjects as the survivorship of radiologists, cellular damage by visible and near-visible light, and relationship between the time of exposure, the radiation dosage, and the amount of biological damage. (A complete list and description of all radiological research in FY 72 is available from the Bureau of Radiological Health.)

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[a] Funds for research granted by the Bureau of Radiological Health are available from a total authorization for the Food and Drug Administration (FDA).

[b] See note b, p. 77.

Grant awards to universities or colleges for FY 72 totaled over $820,000 and ranged in size from under $1,000 to over $100,000.(c)

Federal Evaluations/Studies:

No evaluations or studies of the complete program have been made.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

51, 52.

(c) This figure does not include five nonprofit agencies or institutions (i.e., not postsecondary institutions), one foreign university, or $50,000 in research funds provided by the Navy Department. The majority of active research grant money in FY 72 was awarded to universities.

RADIOLOGICAL HEALTH TRAINING GRANTS (13.106)

Federal Agency:

HEW: Food and Drug Administration, Bureau of Radiological Health

Authorizing Legislation:

Public Health Service Act, as amended, especially sections 301 and 311, P.L. 89-749; Radiation Control for Health and Safety Act of 1968, P.L. 90-602; 42 U.S.C. 241, 243, 264

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$1,024,000	(b)

Program Objectives and Operations:

To support and stimulate training of radiological health specialists and technicians which will provide the necessary manpower capabilities to fulfill staffing requirements for the radiation protection of the public.

Grant funds provide institutional support primarily for the formal graduate training of persons having basic degrees in physics, chemistry, biology, engineering, or related disciplines. Training programs receive full support in the form of funds for student fellowships (including tuition, fees, and monthly allowance), for the hiring of faculty, the securing of equipment, or any purpose that may otherwise strengthen or extend programs of basic instruction. Grants are made to the institution rather than to individuals.

Eligible Applicants:

Any public or nonprofit university or other educational institution offering (or planning to develop) core study programs in radiological health that emphasize the protection of the public and of individuals.

Primary Beneficiaries:

Students in a radiological training program, who must be U.S. citizens to be eligible for awards.

(a) Funds for training granted by the Bureau of Radiological Health are available from a total authorization from the Food and Drug Administration (FDA).

(b) See note b, p. 77.

Available Program Data:

Training grants were awarded to 21 institutions in FY 72. Three-quarters of these grants were used for the training of an estimated 140 specialists at the graduate level (studies at medical, pharmaceutical, arts graduate schools, or institutes of public health), while four junior colleges and one medical school received awards to train 25-30 future radiological technicians. The average grant award in that year was between $45,000 and $50,000.

Federal Evaluations/Studies:

No evaluations or studies of this program have been made.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

ALLIED HEALTH PROFESSIONS--SPECIAL IMPROVEMENT GRANTS (13.377)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Part G, as amended, P.L. 78-410; Health Training Improvement Act of 1970, P.L. 91-519; 42 U.S.C. 295h-1

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$55,000,000	$10,500,000	$2,414,000

Program Objectives and Operations:

To provide, maintain, or improve allied health professions training centers, including enrollment expansion, curriculum improvement, program coordination, and programs for special groups such as veterans, the economically or culturally deprived, and persons reentering allied health professions.

Typical expenditures allowed include salaries and associated fringe benefits of professional and supportive staff, purchase of supplies and equipment, alterations and renovations, books and periodicals, and other necessary costs related to carrying out program objectives. Funds are not to be used for operation of teaching hospitals, other patient care costs, financial assistance, research, research training, or construction. Grantees apply annually for continued support lasting a maximum of 5 years. Formula and matching stipulations do not apply in this program.

Eligible Applicants:

Public or private nonprofit junior colleges, colleges, and universities that qualify as "training centers for allied health professions."

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The grants provide support training towards an Associate of Science, a Bachelor of Science, or a Master's (if first professional degree) degree. In FY 72, 145 institutions received support for 270 out of 457 approved applications. Of the total number of schools, 120 were four-year and 25 were two-year institutions.(a)

(a) HEW reports that this program is being terminated in favor of noncategorical health manpower training programs.

Federal Evaluations/Studies:

No specific evaluations directly relating to this program have been completed. However, an ongoing study of clinical schools for allied health professions education is expected to be completed by Fall, 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

61.

ALLIED HEALTH PROFESSIONS--SPECIAL PROJECT GRANTS (13.305)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 792, P.L. 78-410, as amended; 42 U.S.C. 295h-1

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$14,744,977 $ 7,628,384(a)	$3,569,000 (a)

Program Objectives and Operations:

To plan, establish, develop, demonstrate, or evaluate programs, methods, or techniques for training of allied health personnel.

The only kind of research for which funds may be used is research into educational processes relating to the various allied health professions; e.g., to improve the quality of education and shorten the time for the formal education course, to develop new teaching techniques, and to develop methods of evaluating the educational program.

Formulas and matching stipulations do not apply to this program.

Eligible Applicants:

Public or nonprofit private agencies, organizations, and institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Students may take up baccalaureate, post-baccalaureate, or associate of arts/sciences degree studies under this program. In FY 72, 54 continuation grants were made, plus an additional 82 competitive grants, for a total of 136. Individuals and institutions in 39 states and the District of Columbia received grants for such projects as: (1) training and utilization of optometric technicians at the University of Alabama, Birmingham; and (2) support for the

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(a) Estimated funds awarded for developmental and special project grants only. Expenditure amounts for only these grants are unavailable.

Southern West Virginia Allied Health Consortium at the West Virginia Institute of Technology.[b]

Federal Evaluations/Studies:

No specific evaluations of this program have been done.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

60.

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[b] HEW reports that this special project grants program is being terminated in favor of noncategorical health manpower training programs.

ALLIED HEALTH PROFESSIONS--TRAINEESHIP GRANTS FOR ADVANCED TRAINING (13.303)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VII, Section 793, P.L. 78-410, as amended; 42 U.S.C. 295h-2

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$2,910,000	$1,201,000

Program Objectives and Operations:

To provide financial assistance to students who have completed the basic professional preparation required for employment in one of the allied health professions and are pursuing advanced training to qualify them for positions as teachers, supervisors, administrators, or specialists.

Funds are limited to tuition, fees, stipends, dependency, and transportation allowances. For Advanced Traineeships, a trainee must be in a program lasting at least one academic year. For Advanced Training Institute Traineeships, a trainee must be in a program lasting from 2½ days to less than one academic year. Allotment is not based on formula or matching requirements.

Eligible Applicants:

Public or nonprofit private agencies, organizations, or institutions.

Primary Beneficiaries:

For Advanced Traineeships: full-time students who do not plan to train for a research career. For Advanced Training Institutes Traineeships: allied health workers qualifying for professional employment in a health discipline.

Available Program Data:

Students training for a baccalaureate, master's, or doctorate degree qualify for this program. Approximately 2,000 trainees (about 1,300 in special courses and about 700 in full academic year, degree programs) benefited through grants in FY 72, at institutions located in 36 states and Puerto Rico. For the Training Institute grants in FY 72, 15 universities, one school of medicine, and six national associations received grants to provide a total of 1,339 traineeships. For the Advanced Traineeship grants program, approximately 77 colleges and universities received awards in such areas as dietetics, medical technology, and occupational therapy.(a)

(a) HEW reports that this program is being terminated in favor of noncategorical health manpower training programs.

Federal Evaluations/Studies:

The Division of Allied Health Manpower, National Institutes of Health, completed in 1969 a goals achievement analysis evaluation entitled Allied Health Professions Personnel Training Act of 1966, as Amended. The study deals with the Act, as it provides for the allocation of resources to meet national health care needs and subsequent allied health manpower needs. Information presented here is derived from an abstract of the 48-page study.

Information was collected from professional associations, educational institutions, regional offices, other components of DHEW, and other Federal agencies.

Major findings included data on types of institutions, geographic distribution, enrollment projections, number and types of curriculums supported, utilization of grant funds, trainees' work experience, proposed utilization of training, and manpower need projections.

Major recommendations advanced by this study were as follows:

1. Techniques for collecting continuous and comparable data must be established in agencies, including those on the state and local levels.

2. Allied health personnel education programs must be designed to permit promotion from entry-level occupations into positions requiring increased knowledge, skills, and judgment-making capacity.

3. Expansion and improvement of educational opportunities should be explored through experimentation with new teaching methods and educational technology.

4. Some kind of equivalency examination or a similar measuring device must be developed to determine whether knowledge and skills informally acquired outside formal academic settings may serve as a kind of substitute preparation for entering allied health fields.

A general study not directly related to the Allied Health Training Program is Evaluation of Data Resources for Planning Allied Health Manpower, executed by Operations Research, Inc. and completed in 1971. According to an abstract, the evaluation considers allied health manpower levels and needs nationally, looks at other federal support for allied health training, and includes the following recommendations on data collection:

1. Programs directed to primarily generic occupations (as opposed to health-specific ones and non-specialized support personnel) should not be covered.

2. Data collection via sampling is also not recommended.

3. An annual inventory needs to be developed because of the transitory nature of noncollegiate programs and the need to update its usefulness.

4. Inventory focus should concentrate on the local components constituting the majority portion of training programs.

5. Methodology must be clear on purpose and nature of the inventory as well as definitions particular to purpose, nature and results of the programs.

6. Consequently standard definitions must be developed to solve terminology problems such as using the same terms that have different meanings in different reports.

A study in the utilization of graduates of Advanced Training Programs in Allied Health is currently being made, as well as a National Task Force effort looking at financial aspects of allied health programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

59, 62.

COMPREHENSIVE HEALTH PLANNING--TRAINING, STUDIES, AND DEMONSTRATIONS (13.208)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Services Act, Title III, Section 314(c), as amended; 42 U.S.C. 246

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$4,125,000	$4,575,000

Program Objectives and Operations:

To provide financial support for projects which will train manpower and develop tools and techniques for state and areawide comprehensive health planning programs. Primary emphasis is on long-term graduate degree programs. Continuing education and consumer training programs also are funded.

Grants must be used to improve comprehensive health planning in the U.S. No matching funds are required.

Eligible Applicants:

Any public or nonprofit agency, institution, or other organization.

Primary Beneficiaries:

Students of grantee institutions under the graduate degree program. Under the continuing education program, individuals must be in health or planning fields. The consumer program benefits the general public.

Available Program Data:

The Comprehensive Health Planning and Services program consists of several areas, including graduate education and continuing education, consumer education and studies and demonstrations. In FY 72, there were a total of 38 grants awarded and 1,916 persons in training. According to program officials, support for graduate education was reduced in FY 73.

Federal Evaluations/Studies:

The Comprehensive Health Planning Service (CHPS) contracted with Macro Systems, Inc. (MSI) to do a study titled Evaluation of Graduate Training Programs in Health Planning. Completed in February, 1973, this study evaluated the future of university training programs in comprehensive health planning. The evaluation was charged with the following: (1) develop recommendations to improve the effectiveness of CHPS training programs; and (2) to provide guidelines for evaluating 314(c) training grant applications.

To carry out the overall goals of the study, an assessment was made of the accomplishments of CHPS training programs, including supplying qualified health planners and meeting specific needs of CHPS (a) and (b) agencies (federally supported state and local areawide health planning organizations). The training programs results were examined through a comparative analysis of the findings from three target groups involved in CHP training: (1) the training center officials; (2) students currently enrolled in training programs; and (3) employers of postgraduates in health planning.

MSI conducted intensive, on-site interviews at eight CHPS supported training centers and with CHPS (a) and (b) agencies which employ CHPS graduates. Samples of university officials, employers of CHPS graduates, graduates of University Programs, and current students enrolled in programs were also interviewed.

The following are study recommendations on the management role of CHPS in training programs: (1) CHPS should support a limited number of training centers adequately, rather than provide insufficient funding for many centers; (2) CHPS should establish a mechanism for the coordination of training center programs with health planning agencies; (3) CHPS should support a national clearinghouse for collection and dissemination of information on health planning; and finally, (4) CHPS should expand its research activities in comparative program effectiveness and cost-benefit analysis.

The evaluation stated that a comparison of the effectiveness of all funded programs would provide CHPS with additional data for selecting projects to support. Additional research would also identify specific types of technical assistance CHPS should provide to the training centers in order to improve program operations. It was noted that the development of a cost-benefit analysis system would: (1) improve the financial management of individual programs; (2) assist CHPS in selecting the most qualified programs; and (3) assist CHPS in providing the most appropriate financial technical assistance.

MSI suggested guidelines for Training Center Program Management, Student/Trainee Policies and Extracurricular Activities. These guidelines are for evaluation of new, renewal, and continuing grant applications. They are intended to provide the CHPS review committee with some quantitative measures on which to base their decision for approval or disapproval for grant support.

According to program officials, an additional evaluation on the Comprehensive Health Planning-Training, Studies, and Demonstration Program is currently being undertaken by the Government Accounting Office (GAO). Completion of the study is expected by December, 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

54.

DENTAL AUXILIARY UTILIZATION TRAINING GRANTS (TEAM/DAU) (13.319)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$4,251,000	$3,794,000

Program Objectives and Operations:

To assist schools of dentistry establish, continue, or expand programs for teaching dental students the proper and effective use of trained dental auxiliary dental care delivery teams. Team care will permit a significant increase in the number of services available to the public.

Funds are to be used for the support of existing approved DAU/TEAM programs and developing new TEAM programs. Specific restrictions are imposed on the use of grant funds for travel and purchase of office equipment. Committed support lasts up to five years. Annual noncompeting application is required for committed support. Competing application may be made for extension of originally approved support. No formula or matching requirements apply.

Eligible Applicants:

Accredited and approved dental schools in the U.S., its territories or possessions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The DAU (Dental Auxiliary Utilization) Program supported dental schools in developing a formal continuing program in the utilization of dental auxiliaries or chairside assistants singly employed. The DAU program sponsored grants to 54 dental institutions enrolling 8,137 students in FY 72. Schools in 30 states, the District of Columbia, and Puerto Rico were supported. A total of $2,271,968 in training grants was awarded. The DAU Grants Program has phased out; FY 72 was the final year for providing assistance.

Now being emphasized is the TEAM (Training in Expanded Auxiliary Management) Program which assists the development of academic programs for training dental students in the organization and management of dental practice and the use of a team of dental auxiliaries, including those performing dental expanded duties. In FY 72, TEAM grants supported 12 schools in nine states and Puerto Rico with an enrollment of 1,956 students.

Federal Evaluations/Studies:

An abstracted form of Dental Auxiliary Utilization: A National Evaluation, a study completed by the Medical Foundation, Inc. in 1973, assesses the relative successes of these programs. This study was done for the Bureau of Health Manpower Education, National Institutes of Health.

Information was obtained through a mailed survey administered to general practitioner dentists who graduated during 1960 through 1966 from the 40 dental schools which began participation in the national DAU program in fiscal 1961-1962. The dentists were engaged in established private practice in the U.S. and Puerto Rico. The sample was drawn by selecting from the American Dental Association list every tenth dentist who met the above qualifications.

The mailed survey included two questionnaries--one for the dentist to complete and one for each of his employees--and a work log requesting detailed information about the dental services performed by the dentist and his employees during one full working day. Follow-up procedures obtained a return of 65 percent of the basic sample of 1,614.

For analytic purposes the dentists were divided according to time periods according to the year of graduation and if this latter year was before or after the existence of the DAU program. The dental schools were also classified in terms of "above average," "average," "below average" according to the quality of DAU training offered during the mid-1960's.

Some of the major results of the investigation were:

1. Compared with earlier graduates, the later graduates from better-than-average schools were somewhat more likely to employ auxiliaries, although differences among the groups were relatively small.

2. Most recent graduates had received little clinical training in auxiliary utilization, a fact emphasizing the need to more carefully monitor future training programs. Fifty-eight percent of the 1964-66 graduates had less than 50 hours training experience with chairside assistants; 31 percent had 50 hours or more; 11 percent had no experience reported.

3. More diagnostic and preventive procedures were done in offices where auxiliaries were employed to provide some services directly to patients. No clear evidence was found to relate the utilization of chairside assistants to productivity.

4. Dentists' employment plans indicated that many more clinical auxiliaries will be needed throughout the country in the near future.

5. A majority of the sample dentists would at least consider hiring expanded-duties auxiliaries who perform selected intraoral procedures under supervision.

It was advised that to make increasingly effective use of auxiliary personnel, it would be necessary to identify those particular expanded functions with the greatest productivity for private practice as methods of auxiliary utilization probably differ according to whether or not a solo practitioner, group practice, or a clinical setting is involved. All in all, many more conventional auxiliaries as well as expanded dental auxiliaries need to be trained and dentists need to be trained to use them.

A continuing study by NIH of relevance involves the recruitment and admission of minority dental students.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

DENTAL HEALTH CONTINUING EDUCATION TRAINING GRANTS (13.320)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$200,000	$355,000

Program Objectives and Operations:

To assist schools of dentistry and other public and nonprofit institutions to establish, expand, and improve organized programs of continuing professional education that offer the widest possible range of courses in as many decentralized locations as necessary to attract the maximum participation of the nation's practitioners.

Funds are available for direct costs. Allowances are also made for indirect costs, but no funds are provided for tuition, stipends, travel, or other direct support of trainees. Committed support requires annual noncompeting application, for up to five years. Competing application may be made to extend originally approved support. No formula or matching requirements exist.

Eligible Applicants:

Recognized schools of dentistry, extension schools or departments of universities and colleges, and teaching hospitals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The program supports continuing education at all educational levels for practicing dentists and dental auxiliaries. In FY 72, grants went to five institutions, four of which were publicly controlled: University of Alabama, $30,000; University of the Pacific, $37,000; University of California, San Francisco, $38,000; Medical College of Georgia, $35,000; University of South Dakota, $60,000. The last-named has no dental school, but the grant supported a project to develop an educational television network for broadcasting continuing dental education programs.

Federal Evaluations/Studies:

An abstract of the final report on Communication Resources in the Division of Dental Health touches upon some concerns and objectives of this grants program. The report, completed during 1968-1969 by Dr. F. W. Noel and Dr. J. W. Brown for the Bureau of Health Manpower Education, deals with a general problem of filling manpower needs in dentistry, i.e., educating the public about good dental health practice, attracting students to the dental profession, improving the quality of dental instruction, and expanding and improving continuing education for practicing dentists, through the development of communication resources for informative purposes.

The study (1) determined the current status and effectiveness of communication activities in the Division of Dental Health (DDH), particularly in reference to nonfederal government audiences where visual media have been utilized; (2) identified the criteria employed by DDH to assess its current visual communication program; (3) formulated a complete and appropriate set of such criteria for future use by DDH; (4) proposed modules of a communication program satisfying criteria requirements; and (5) suggested alternative combinations of these modules to give DDH a choice as to the intensity and diversity of effort and style of organization it believes appropriate to its budget, political environment, and future development.

Continuing studies indirectly related to this program are an ongoing dental education evaluation involving the MINDS region (Minnesota, Idaho, Nebraska and the Dakotas) and a National Institutes of Health report on minority dental student recruitment and admissions.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

FAMILY MEDICINE--TRAINING GRANTS (FAMILY MEDICINE) (13.379)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 767, Part D, Title VII, as amended; 85 Stat. 457; 42 U.S.C. 295

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$25,000,000	$4,998,887	$ 0 (a)

Program Objectives and Operations:

To increase the number of physicians practicing family medicine.

Grants cover the cost of developing and operating training programs and providing financial assistance to participants in approved training programs. Grants are not to be used for construction. The program is authorized to provide assistance for three years to the fiscal year ending June 30, 1974. Renewal policy for application for funds had not been determined in FY 72.

Eligible Applicants:

Public and nonprofit private hospitals.

Primary Beneficiaries:

Public and nonprofit private hospitals and also physicians who will conduct medical practice in family medicine.

Available Program Data:

In FY 72, awards were made to 52 hospitals for the provision of doctorate training facilities. A total of 17 of these recipients were university medical schools and 35 were university-affiliated hospitals. The total number of people trained under this program was estimated to be 650 residents in community, university-affiliated, and university hospitals. Hospitals receiving funds were located in 28 states.

These training grants are authorized to support medical students, interns, residents, practicing physicians, or other medical personnel who are in need thereof and who plan to specialize or practice in family medicine in residency programs.

(a) This is a new program in FY 72.

Undergraduate programs are authorized under Section 772 of the same Act to be assisted by Special Project Grants.

Federal Evaluations/Studies:

This is a new program for which evaluations have not been undertaken as yet.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

GRADUATE TRAINING IN PUBLIC HEALTH--PROJECT GRANTS (PUBLIC HEALTH PROJECT GRANTS (13.338)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, as amended, Section 309(a), P.L. 78-410;
42 U.S.C. 242g (a)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$4,517,000	$3,258,000

Program Objectives and Operations:

To expand and/or strengthen graduate or specialized public health training, and to encourage the development of additional programs of instruction necessary to train personnel to meet the emerging needs in public health.

Funds may be used for personnel, equipment, consumable supplies, domestic travel, consultants and guest lecturers, rental of space, renovation, and other costs directly related to the project. Grants are not for the construction of facilities, land acquisition, foreign travel, or support of students including fellowships, stipends, tuition, fees, travel allowances, etc. Grantees reapply annually for continuation support for up to a maximum of 5 years. There are no formula or matching requirements.

Eligible Applicants:

Public health schools and other public or nonprofit private institutions providing graduate or specialized training in public health.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Schools providing continuing education at all levels including undergraduate, master's, doctorate, and post-doctorate degrees qualified for support. In FY 72, grants were awarded to institutions providing training in environmental health, preventive medicine, public health nursing, preparation of public health nursing teachers, medical care economics and administration/practice, short-term training, public health education, population studies, biostatistics, epidemiology, chronic disease, laboratory training, and nutrition. The largest number of grants went into the fields of preventive medicine (25 grants plus one supplement) and preventive dentistry (15 grants).

The following is a summary table on these project grants:

Types of Schools Awarded Grants in Fiscal Year 1972, Number[a] and Amount of Grants Awarded.

Type of School	No. of Schools	No. of Grants	Amount of Grants
Public Health	15	43	$2,111,146
Nursing	5	5	161,621
Engineering	3	3	68,928
Medicine	25	27	1,345,227
Dentistry	13	13	690,683
Other	5	5	139,396
TOTAL	66	96	$4,517,000

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[a] Source: U.S. Department of Health, Education, and Welfare, National Institutes of Health, Bureau of Health Manpower Education, Annual Report, Project Grants for Public Health Training Fiscal Year 1972 (Washington, D.C.: Unpublished, 1973.)

Other types of schools included graduate programs in hospital administration.

The authorization for this program expired in FY 1972. Despite legislation permitting a one-year extension, no funds have been appropriated for new projects. Only continuation grants are presently being provided.

Federal Evaluations/Studies:

There are no studies directly related to this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

63, 67.

HEALTH MANPOWER EDUCATION INITIATIVE AWARDS (SPECIAL HEALTH CAREERS OPPORTUNITY GRANTS) (13.380)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 774(b), as amended by the Comprehensive Health Manpower Training Act of 1971, P.L. 92-157

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$45,000,000	$20,000,000[(a)]	$ 0 [(a)]

Program Objectives and Operations:

To recruit into the health professions: (1) students likely to practice in areas with shortages of health personnel; and (2) students who are financially or otherwise disadvantaged.

Funds may be used for costs necessary to establish or operate projects designed to: (1) identify and increase admissions to and enrollment in health professions of individuals whose backgrounds and interests make it reasonable to assume that they will practice in rural and other areas of health profession personnel shortage; (2) identify individuals with a potential for training but socioeconomically unable to fulfill the potential, and encourage and assist their enrollment in health professions schools or preparatory postsecondary studies. The program allotment is not based on formula or matching requirements.

Eligible Applicants:

Public or nonprofit private health or educational entities.

Primary Beneficiaries:

Students.

Available Program Data:

The Special Health Careers Program in FY 72 received $5 million to establish and operate projects designed to increase admissions to and enrollment in health professional schools. In that year, summer programs, parallel programs, and transitional-type programs were supported, and student stipends provided. For the 42 programs in operation in FY 72, approximately $1,087,000 was appropriated for "trainee expenses" and an estimated 1,903 students benefited therefrom. An estimated total of 1,656 students participated.

(a) This was a new program in FY 72. Funds were obligated in FY 72 and the first quarter of FY 73 by special authority.

The following are related programs authorized under Section 744(a) of the Public Health Service Act, but are not separately identified in the OMB Catalog:

1. Area Health Education Center (AHEC) contracts were awarded to 11 universities in FY 1972 to establish programs with other training institutions and health care facilities for providing clinical education for the health professions in areas with serious shortages of health personnel.

2. Two contracts have been awarded under the Health Manpower Education Initiative Awards program of sponsoring community-based training networks. The University of Mississippi Medical Center, Jackson, and the Johns Hopkins University, Baltimore, received these awards.

3. The Physician's Assistant program awarded contracts to 38 institutional schools of medicine and to one foundation, supporting about 1,430 students in training to be physician's assistants.

4. Six postsecondary institutions and two organizations received grants to develop computer techniques for organizing and analyzing data on the work performed by health workers.

Federal Evaluations/Studies:

As the programs are relatively new, being created by the Comprehensive Health Manpower Training Act of 1971, complete evaluation reports cannot be expected at this time.

Most of the grantees have not completed their first year of operation under the Special Health Career Opportunity Grants sponsorship. Evaluation reports for this latter program are not due until October, 1973.

In progress is a design proposal for evaluating the Area Health Education Centers program.

In 1973, site visits were completed by program staff to all 38 Physician's programs, in order to evaluate two main aspects of performance as they complied with contract guidelines in the "Essentials of an Approved Educational Program for the Primary Care Physician's Assistant" of the Council on Medical Education, American Medical Association. All but three programs were determined to be satisfactorily performing.

The American Medical Association earlier began an as-yet-uncompleted contract to evaluate the physician's assistant training programs in terms of the association's criteria for accreditation. By May 1973, two program plans were found unable to meet accreditation standards and were thus cancelled.

Systematics General is also preparing to execute a survey contract, covering as many as possible of the 500 practicing physician's assistants, to identify the functions they perform for the purpose of revealing how well the training programs relate to skills required for practice. The number of physician's assistants who practice in shortage areas and the numbers who are members of the minority groups and women will also be assessed.

Indirectly related to aspects of this program is an Evaluation of Health Manpower Programs as They Relate to American Indians, including Alaskan natives, which was completed in FY 72 by Cresap, McCormick and Paget, Inc. Information on this study was derived from an abstract.

The aim of the investigation was to collect data for the development of policies and programs to expand efforts to train Indians for health careers. Through interviews and questionnaries the study examined the relationship to Indians of the health manpower training system in all relevant federal organizations and agencies and also the interests and attitudes of Indians in regard to health careers.

As regards the role of the Bureau of Health Manpower Education (BHME), little information has been gathered on the impact and effectiveness of its programs relative to Indians. Also intra- and interdepartmental coordination in the larger context of HEW activities and activities of other agencies has been quite limited. Other findings revealed that, while substantial resources are currently available for assisting Indian students, no system for collecting, storing and communicating pertinent information exists. Considerable effort by the Office of Health Manpower Opportunity would be required to establish these systems.

In general, there was little student awareness of health careers, training opportunities (only 25 percent of high school students interviewed knew about them) and the substance of health work (less than 40 percent were aware of it). Similarly, the underemployed or potential employee group had low awareness, although they were more exposed to health career people. The preferred means of heightening awareness of this group was through community-based programs and activities.

Generally speaking, the specifically measured interest in health careers was reasonably high, although specificity of interest was very limited and often expressed in nonprofessional positions. Criteria for making career choices mostly concerned helping Indian people.

These limitations were seen to be a reflection of the limited effectiveness of sources of information, support, and health-related education in health training, although expectations regarding the capacity for guidance of most information sources were excessively optimistic.

Recommendations for the BHME stated that the Office of Health Manpower Opportunity should become the focal point for all Indian health manpower training activities and operations within the federal government. The proposed Indian Branch could be used for this role. Administrative duties could include: (1) communicating the meaning of new Comprehensive Health Manpower Training legislation as concerns minorities to health professional schools and other potential grantees and contractors; (2) establishing the mechanisms for evaluating proposals and administering contracts and grants; (3) implementing an information system that would communicate health manpower opportunities to the relevant groups such as parents, teachers, counselors, and students; (4) establishing contacts and dialogues with health professions administrators, counselors and students to identify problem areas and opportunities for improvement; and (5) assisting other agencies in operations for Indian interests.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67, 68, 69.

HEALTH PROFESSIONS CAPITATION GRANTS (FORMULA GRANTS TO HEALTH PROFESSIONS SCHOOLS) (13.339)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Health Professions Educational Assistance amendments of 1965, P.L. 89-290, as amended by the Health Manpower Act of 1968, P.L. 90-490, and the Comprehensive Health Manpower Training Act of 1971, P.L. 92-157; 42 U.S.C. 295

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$234,000,000	$155,200,000	$50,055,000

Program Objectives and Operations:

To provide a dependable financial base for educational programs in schools of medicine, dentistry, optometry, podiatry, osteopathy, pharmacy, and veterinary medicine.

Funds may be used to increase student enrollment, to aid and shorten curriculum, and to train physician assistants and dental therapists. Funds are distributed on a formula basis.

Eligible Applicants:

Public or nonprofit accredited schools (or those which have reasonable assurance of accreditation).

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 281 schools received these capitation grants.

TABLE 1

Institutions Receiving Capitation Grants
Fiscal Year 1972

Institutional Type	Number of Institutions	Amount of Grants
Schools of Medicine	113	$ 90,190,672
Schools of Osteopathy	7	4,821,241
Schools of Dentistry	55	34,988,087
Schools of Pharmacy	73	15,102,662
Schools of Veterinary Medicine	16	6,970,381
Schools of Optometry	12	2,170,824
Schools of Podiatry	5	956,133
Total	281	$155,200,000

Source: U.S. Department of Health, Education, and Welfare, National Institutes of Health, Bureau of Health Manpower Education. Health Professions Educational Improvement Program, (Washington, D.C.: 1972), Table 1.

TABLE 2

First-Year Student Places Added Under Health Professions Capitation Grant Programs

1972-73 Academic Year (Actual)[a]

	Mandatory	Bonus[b]	Total
Medicine	935	571	1,506
Osteopathy	54	57	111
Dentistry	416	101	517
Subtotal	1,405	729	2,134
Optometry	69	32	101
Pharmacy	504	269	773
Podiatry	35	40	75
Veterinary Medicine	125	20	145
Subtotal	733	361	1,094
GRAND TOTAL	2,138	1,090	3,228

Source: Data from Bureau of Health Manpower Education.

(a) Data represent additional first-year student places that may be attributed to the enrollment increase requirement and enrollment bonus student provision under health professions capitation grants. Enrollment increase commitments made under grants for construction of health professions teaching facilities are excluded.

(b) Numbers in bonus columns represent the increment required to qualify first-year classes as "enrollment bonus students."

Federal Evaluations/Studies:

A recent study of this program was completed in July 1971 by Dr. Isadore Goldberg of Programming Methods, Inc. and reported under the title of Impact of the Allied Health Basic Improvement Grant Program on Health Education Programs. According to the abstract, this study was essentially a statistical analysis of data that could serve as a substantiating baseline for a more qualitative evaluation report. The study sought to evaluate any improvements in educational programs made possible by the grants, to identify sources of program costs and patterns of fund expenditures, and to note any significant differences in the needs for and use of funds by institutions.

Information was obtained through mail survey questionnaires developed by the Allied Health Manpower Division and a review of related literature. Usable questionnaire responses were received from 62 percent of 232 institutions, which represented 55 percent of the 483 total programs. Such a response rate and the lack of adjustments to account for nonresponsive institutions called for cautious interpretation of the findings.

Study results included the following: (1) Trends analysis showed enrollments, graduates, and faculty increased at grantee institutions at similar rates from 1966 through 1969 for all responding programs; (2) during the same period, enrollment and graduation of males and blacks increased at a rate exceeding the growth rate of all students; (3) the cost of teaching personnel was by far the largest item in the overall budget; and (4) insufficient operating funds was cited as a constraint on enrollment expansion by 70 percent of the programs.

A continuing study related to Health Professions Capitation Grants has been entitled "Federal Programs and Medical School Operations: An Evaluation." Also under way is a "Study of Cost of Education of the Health Professions and Academic Health Center Cost Allocation Studies."

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

66, 67.

HEALTH PROFESSIONS--FINANCIAL DISTRESS GRANTS (13.381)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 773, Part E, Title VII, as amended; 84 Stat. 446

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$20,000,000	$11,151,109	$29,763,000

Program Objectives and Operations:

To assist health professions schools in financial straits meet the cost of operation or accreditation requirements.

Institutions which may be assisted include schools of medicine, osteopathy, dentistry, optometry, pharmacy, podiatry, and veterinary medicine. Funds are not to be used for construction. Assistance continues from date of grant to the end of the next succeeding federal fiscal year. Funds must be obligated by grantee during a specified budget period. Matching requirements: during the year the grant is made, the school must expend funds from non-federal sources in an amount equal to at least the average funds expended annually in the 3 years immediately preceding the year in which the financial grant is requested.

Eligible Applicants:

Schools accredited by agencies recognized by the Commissioner of Education or schools with a letter of reasonable assurance of accreditation from the Commissioner of Education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 19 schools received grants. Nine schools of medicine received a total of $6,610,281. Four schools of dentistry received $2,240,566. Grants given to two schools of optometry totaled $269,672, while two schools of podiatry received $134,731.

An osteopathic school received $360,000, two pharmaceutical schools were awarded $1,150,341 in grants, and one veterinary medicine school was assisted with a grant of $385,518.

Federal Evaluations/Studies:

As a program recently authorized under the Comprehensive Health Manpower Training Act of 1971 (an amendment to the Public Health Service Act), no formal program evaluations relating to Financial Distress Grant programs have been developed as yet. In progress currently is a report being prepared for Congress on the new programs created by the Act.

HEALTH PROFESSIONS--SCHOLARSHIPS (HP SCHOLARSHIPS) (13.341)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Part F, Title VII, Section 780(d) as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$15,467,984	$15,652,000

Program Objectives and Operations:

To increase educational opportunities for students of exceptional financial need to pursue a course of study in specific health professions.

Funds are allocated to eligible schools by established statutory formula. Scholarships are awarded to cover tuition, fees, books, equipment, and related educational costs determined by the school. Scholarship awards cannot exceed $3,500 for any one academic year. Each school's allotment: (1) $3,000 multiplied by number of full-time students in school from low-income backgrounds as determined by Secretary's regulations; or (2) $3,000 multiplied by one-tenth of number of full-time students in the school with a pro-rata share if funds appropriated are less the formula above. No matching funds required. Students first assisted under the program continue to be assisted until their courses of study are completed.

Eligible Applicants:

Any accredited public or other nonprofit school of medicine, dentistry, osteopathy, optometry, podiatry, pharmacy, or veterinary medicine providing study leading to a doctor's or equivalent degree, in all the above fields (except in pharmacy, where study for a bachelor of science or equivalent degree qualifies) located in a state, the District of Columbia, Puerto Rico, the Virgin Islands, the Canal Zone, Guam, American Samoa, or Pacific Island Trust Territory.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 108 medical schools, seven osteopathic schools, 52 dental schools, 12 optometric schools, 74 pharmacuetical schools, five podiatric schools, and 18 schools of veterinary medicine were assisted.

Of the estimated 21,604 students with exceptional financial need receiving scholarships, 18,645 were male and 2,959 were female. Of these students, 1,713 were black; 30 were American Indian; 566 were Spanish-surnamed; 578 were Oriental; all others totaled 18,717.

Federal Evaluations/Studies:

An abstract of the study How Medical Students Finance Their Education deals with financing the costs of education by medical and osteopathic students. The final report, completed in FY 68 by the National Institutes of Health (NIH) and based on a survey conducted in cooperation with the American Association of Medical Colleges and the American Association of Osteopathic Colleges, examined the impact of the 1963 Health Professions Educational Assistance Act (P.L. 88-129) on student financing.

According to the abstracted reports, the investigation included an assessment of: (1) the cost of medical or osteopathic education to the student; (2) the sources of student financial support; and (3) the economic and social backgrounds of the students and the specific effects of loan and scholarship programs on educational support on health professions students.

To obtain the necessary information, questionnaires were distributed to all full-time students in each of the medical and osteopathic schools. The responses represented a return of 66 percent on the part of the medical students and 75 percent from osteopathic students.

Major findings for the 1967-68 academic year included characteristics of students (such as marital, economic, and educational status), their average annual expenses (such as tuition, fees, and books), their work experience, sources of their income and their indebtedness.

As this study was primarily conducted to provide an information source for making future policy issues, recommendations were not made.

A study of The Health Professions Educational Assistance Program conducted by the Division of Allied Health Manpower and completed in 1970 generally applies to health programs of the Bureau of Health Manpower Education. Information on the final report was obtained from an abstract.

The report, undertaken in response to Congressional directive, attempted to assess seven years' accomplishment of the construction, institutional and special project grants, student loans and scholarships provided by the Assistance Program, in terms of their impact on the professional health manpower supply. Achievement was measured against the comprehensive program objectives of: (1) increasing the output of health professions schools; (2) improving the quality of education; and (3) providing financial aid to needy students.

Although the development of hard statistical or shortage models was outside of the scope of this report, general indicators of health manpower numerical requirements were developed by weighing interaction of patterns of service, productivity, and utilization with those of geographical distribution, professional specialization, and patient composition. Professional associations of each of the occupational groups provided supply statistics.

In general terms, the report showed that among the professions, medicine and dentistry have received the principal financial support; construction has been the major item for which funds have been spent; and basic improvement grants and student loans have also used substantial amounts. Special improvements grants, authorized in 1965, were funded for the first time in FY 1968.

NIH completed in 1971 another study of federal health manpower programs. Recommendations made by HEW for future steps to be taken by the federal government, particularly NIH, are summarized here from an abstracted form of the original study. These recommendations were incorporated in "Health Manpower Assistance Act of 1971."

Research Training Programs--The study concluded that existing authorities are adequate to provide the flexibility necessary to attain the goals of the program; i.e., encouraging and maintaining the development of the biomedical research base and training the faculty needed for educating future research scientists.

Biomedical Communications --Experience indicated that existing legislative authorities are sound, and so it was recommended that these programs should be continued on an enhanced basis.

Health Professions Education --Increased flexibility through elimination of strict categorical limitations governing institutional participation, and federal support for projects in areas of educationally related deficiencies such as health manpower distribution and utilization are needed and should be achieved through modifications of existing legislative authority. Toward this end, the report recommended that existing Health Professions, Education, Nursing Training, and Library Facilities Construction Assistance legislation be combined, extended, and expanded to:

- Eliminate the present emphasis on projected increases in class enrollment size as the primary precondition for grant awards through the use of educational improvement grants to schools of medicine, osteopathy and dentistry on a capitation basis of up to $6,000 for each graduate.

- Award special project grants for purposes of facilitating increases in student enrollments through performance of appropriate and relevant curricular revision in order to shorten the duration of training necessary for degree certification.

- Develop a program of health manpower educational initiative award grants. These could serve as the major facet of a federal effort to supply, distribute, and utilize responsive health manpower delivery services.

- Consolidate into a single comprehensive program the five existing categorical health professions construction assistance authorities. This would facilitate more enhanced and expanded health manpower training and educational activities.

- Award health professions scholarships to students of medicine, osteopathy, and dentistry, where manpower is in critically short supply. The program could be expanded to students in other health professions if necessary.

- Provide federal guarantees for loans required by students in any of the health professions. It was also recommended that the government assume loans of those students who practice after graduation in geographic areas designated as being medically underserved.

Relevant continuing studies not yet completed include an evaluation of the methods currently used to determine student financial needs, minority student recruitment and admission, and a follow-up training study.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

57, 67.

HEALTH PROFESSIONS--SPECIAL PROJECTS-(13.383)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 772, Part E, Title VII, as amended; 85 Stat. 445

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$118,000,000	$61,710,406	$57,465,000

Program Objectives and Operations:

To assist health professions schools with a potential to increase enrollments as well as to enable schools to experiment with programs designed to increase the quality of trained personnel.

Competitive grants may be used to carry out projects directed toward specified purposes, such as enrollment increases, curriculum improvements, interdisciplinary training programs, expansion of minority enrollment and programs and family medicine. Additional and more specific purposes for assistance include shortening curriculums and improving the geographic distribution of personnel.

Funds may not be used for the costs of operating teaching hospitals not specifically attributable to the project; financial assistance to students, interns, residents (except to support tutoring in family medicine for medical and osteopathic students); construction; or any other unauthorized cost.

Eligible Applicants:

Public or nonprofit private schools of medicine, dentistry, osteopathy, veterinary medicine, optometry, pharmacy, and podiatry which are accredited or have reasonable assurance of accreditation. Contracts awarded to public or private health or educational entities to execute a project directed to specified purposes.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

According to data supplied by the Bureau of Health Manpower Education (BHME), a total of 291 curriculum school programs benefited during FY 72 from Special Project Grants in about 40 states, the District of Columbia, and Puerto Rico.

There were a total of 148 programs in about 94 medical schools in at least 33 states, the District of Columbia, and Puerto Rico. Three schools of osteopathy received money for four programs. Dental school grantees totaled about 28, with 40 programs altogether, in at least 23 states. A total of 16 programs were assisted in about 11 schools of optometry in eight states. About 23 schools of pharmacy received support for 24 programs. Three schools of podiatry in three states received awards for five programs, and six schools of veterinary medicine in six states had six programs supported.

In addition to these programs, 47 grants were given for preceptorship training to one school of osteopathy for one program and 46 schools of medicine for 47 curriculums in at least 28 states and the District of Columbia. The rest of the monies went into making 12 contracts, four of which went to universities and colleges, eight to private organizations.

Special Project Grants went to undergraduate studies in family medicine because assistance for residency graduate studies in Family Medicine is already accommodated by Section 767 of the same Public Health Service Act which authorizes Family Medicine Grants.

Federal Evaluations/Studies:

An evaluation that relates to some of the objectives of this program is currently being conducted for BHME by the San Francisco Medical Center of the University of California on the effectiveness of equal educational opportunity policies and practices in U.S. health professions schools.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

66, 67.

HEALTH PROFESSIONS--START-UP ASSISTANCE (AND CONVERSION GRANTS) (13.384)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 771(a), Part E, Title VII, as amended; 85 Stat. 443

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$3,309,959 Start-Up	$0(a)
	$2,500,000 Conversion	$0(a)

Program Objectives and Operations:

To assist new schools of medicine, osteopathy, or dentistry in accelerating the start of instruction or increasing the size of the entering class. Also, this program assists two-year medical schools in converting to four-year institutions.

Grants are given on the condition that first-year full-time enrollment must exceed 23 students. Grants may not be used for construction, student financial assistance, or operation of teaching hospitals. Grants are available and may be renewed for a period of up to four years. There are formula stipulations but no matching requirements.

Eligible Applicants:

Public and nonprofit new schools of medicine, osteopathy, or dentistry.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Conversion Grants part of the program is first entitled to all available funds. Start-Up assistance is provided only if additional funds remain in the program. In FY 72, Rutgers Medical School received a conversion grant for $1,600,000. Dartmouth Medical School received $900,000.

In FY 72, Start-Up grants went to 10 schools. Dental schools included Boston University, the University of Colorado, the University of Florida, the University of Oklahoma, and Southern Illinois University. Medical schools funded were the University of South Alabama, Mayo Medical School, the University of Minnesota, Duluth, Southern Illinois University, and Texas Tech University.

(a) This was a new program in FY 72.

According to program officials no support was provided for Start-Up Assistance to new schools in FY 73 as grants awarded for conversion purposes exhausted the available supply of funds.

Federal Evaluations/Studies:

No evaluations specifically referring to this program have been made.

HEALTH PROFESSIONS--STUDENT LOANS (HPSL) (13.342)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Part C, Title VII, Section 740, as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$50,000,000	$29,863,309	$29,863,000

Program Objectives and Operations:

To increase educational opportunities for students in need of financial assistance to pursue a course of study in specified health professions by providing long-term, low-interest loans.

Funds are allocated to schools by statutory formula for purposes of capitalizing a student loan fund. Funds can be used only for students pursuing a full-time course of study; for costs arising from litigation in connection with the collection of any obligation to the fund and interest; and for making transfers to the Health Professions Loan Scholarship Fund. Loans to students cover tuition, fees, books, equipment, and reasonably necessary related educational costs and as determined by the school. Student loans may not exceed $3,500 for any one academic year.

Eligible Applicants:

Any accredited public or other nonprofit school of medicine, dentistry, osteopathy, optometry, podiatry, pharmacy, or veterinary medicine providing course of study leading respectively to a doctor's degree or equivalent in all the above disciplines (except in pharmacy where a bachelor of science or equivalent degree qualifies) located in a state, the District of Columbia, Puerto Rico, or the Virgin Islands.

Primary Beneficiaries:

Any student enrolled or accepted for enrollment in a full-time academic workload who is in need of the loan in order to pursue a course of study and is or will be a permanent resident of the United States or its territories.

Available Program Data:

Students must reapply each year for continuation of support. Those students first assisted under the program are authorized to have continued assistance until they complete their course of study.

There are two authorized methods of capitalizing loan funds--the Federal Capital Loan and the Federal Capital Contribution--the latter being the only plan in FY 72 under which funds were available. A school must match Federal Capital Contribution with one-ninth of the allotment, so that at all times the school's deposit in the fund represents one-tenth the total amount of deposited funds. Under the Federal Capital Loan method not used in FY 72, a school must execute a promissory note for the repayment of principal and interest in the Federal Capital Loan.

Loan forgiveness is a feature of this program. As a result of the Comprehensive Health Manpower Training Act of 1971, forgiveness provisions are expanded and extended to all the health professions disciplines.

If an individual enters into an agreement with the Secretary of HEW to practice medicine, dentistry, osteopathy, optometry, pharmacy, podiatry, or veterinary medicine for at least two years in an area which has been determined by the state health authority to have a shortage and need for persons trained in his profession, the federal government will cancel or repay, as applicable, 60 percent of the outstanding principal and interest on any educational loans made for the costs of professional education. An additional 25 percent of the loans will be canceled or repaid for a third year of practice, up to a total of 85 percent forgiveness.

A student borrower from a low-income or disadvantaged family who fails to complete his studies, is in exceptionally needy circumstances, and cannot be expected to resume his studies within two years of the date that he terminated them, can have his loans forgiven.

Student Loan Assistance by Type of Schools

FY 1972

Type of School	Number of Participating Schools	Total Enrollments[a]	Number of Students Assisted[a]	Percentage of Students Assisted
Total	260	92,755	30,817	33.2
Medicine	108	44,124	14,911	33.8
Osteopathy	7	2,351	1,147	48.8
Dentistry	51	16,917	6,[illegible]3	39.6
Optometry	12	3,159	1,[illegible]4	39.7
Pharmacy	60	19,934	4,681	23.5
Podiatry	4	1,065	489	45.9
Veterinary Medicine	18	5,205	1,642	31.5

a/ Estimated.

Source: Data supplied by the Division of Physician and Health Professions Education, Bureau of Health Manpower Education.

Distributions in terms of the sex and racial/ethnic groups of recipient students have been determined by the National Institutes of Health (NIH) on a slightly different estimated total than shown in the table. These distributions are as follows: a total of 27,698 males and 3,549 females were given loans for FY 72; black recipients totaled 462 females and 1,855 males; American Indian students numbered 8 females and 32 males; Oriental students totaled 147 females and 575 males; 167 female and 556 male recipients had Spanish surnames; and all other students totaled 2,765 females and 24,683 males.

Federal Evaluations/Studies:

A study completed in 1973 and titled An Evaluation of the Effectiveness of Loan Forgiveness as an Incentive for Health Practitioners to Locate in Medically Underserved Areas was prepared by CONSAD Research Corporation for the Department of Health, Education, and Welfare. According to the executive summary, this study reviews the characteristics and performance of federal and state loan forgiveness programs over the past decade with particular emphasis on participation rates, efficiency rates, and the extent to which programs have contributed physicians to federally defined shortage counties. Characteristics of the program participants and the shortage counties are also identified. Literature is reviewed and a rudimentary model of physician location decision making is postulated.

Among the major findings, fundamental differences between state and federal HPEAA forgiveness programs were distinguished. State loans were forgiven on an agreement to serve in a state-designated area while federal HPEAA loans were forgiven if the professional practiced in a federal/state designated shortage area, but without a service commitment at the time the loan was given. In November 1971, federal benefits extended forgiveness to a portion of any educational loans incurred for professional education for practice in a federally designated shortage area.

In states selected for observation, the service agreement loan programs only provided about 17 percent of physicians in the classes of 1960-65 inclusive to federal/state designated shortage areas.(a) Otherwise, most state service agreement loan recipients do not locate in federally designated areas. Such loans are not efficient, as about 60 percent of the recipients do not use forgiveness to repay their loans; they buy out of the program without completing the terms of their service. Loan recipients from shortage areas prefer to obtain training in a specialty after they graduate from public medical schools and before going to a shortage area. Physicians in general prefer to enter practice in a county with medium-size or larger hospitals, and physician distributions are thus related to population and hospital size. The larger the population, the larger the hospitals, the more favorable the population/physician ratios.

(a) Federal government works in conjunction with state health authority in each state to designate areas.

The forgiveness programs for HPEAA loans has not been used widely. From November 1972, after four years of operation, only 42 physicians, 82 dentists, and 22 optometrists had received cancellation benefits.

It appears that loan forgiveness programs and service agreement loan programs alone, as they are constituted, will not substantially improve the continued severe physician shortage experienced by counties. Shortage counties average about six physicians per 100,000 population. No positive relationship seems to exist between the terms of forgiveness and the effectiveness or efficiency of the program for the range of rates and amounts considered. Effectiveness or efficiency of the state programs was not affected by the liberalness of forgiveness provisions.

Concerning study recommendations, a discussion of three possible options along with a series of sub-options was presented. The three main options constituted: (1) doing nothing until the effect of the most recent changes (1971) in loan forgiveness (i.e., loan repayment) have been observed; (2) modifying current provisions of the legislation; and (3) looking for a new program.

Although they merit further analysis, complete evaluation of the alternatives was not undertaken.

Sub-options for which no new legislation were required included: (1) encouraging linkages between medical schools and smaller rural hospitals; (2) funding the physician shortage area scholarship program; and (3) encouraging certain medical schools to begin pilot programs of recruitment, screening, and selection of medical students disposed to practice in shortage areas. New legislation was required among other options: (1) to provide incentive bonuses to medical schools according to the number of graduates who locate in shortage areas; (2) to endow seats in certain medical schools subject to the condition that persons admitted must agree to serve a minimum period of years in a shortage area; and (3) to fund expanded residency training programs especially in community medicine in hospitals or in reasonable nearness to shortage areas.

Related continuing studies include a follow-up training study; minority student recruitment and admission; an evaluation of the methods currently used to determine student financial needs; and a study to determine collection problems.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

64, 67.

HEALTH PROFESSIONS TEACHING FACILITIES--CONSTRUCTION GRANTS (13.340)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VII, Parts A and B, Section 720, as amended; 70 Stat 717; 42 U.S.C. 292

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$225,000,000	$10,929,463(a)	$179,291,000(a)

Program Objectives and Operations:

To increase the output of health professions personnel, particularly in geographic areas having a critical shortage of physicians and other health professions personnel, and to increase activity in health research.

Teaching facilities constructed with this assistance must be used for teaching purposes specified in the application for a 20-year period. For interim facilities, 10 years or a lesser period is considered the length of a useful life for these facilities. The facility must be constructed according to the application. Institutions or schools are paid on a cost reimbursement basis during the instruction period of an average range of 1 to 5 years. Matching is required.

Eligible Applicants:

New and existing schools of medicine, osteopathy, dentistry, pharmacy, optometry, podiatry, veterinary medicine, public health, or any combination thereof, may be assisted in the construction of teaching facilities. Schools of medicine, dentistry and osteopathy may be supported in the construction of affiliated teaching hospital or outpatient facilities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72 five institutions received grants. Approximately 112 student places were created for physicians and 72 such places were established for dentists in these institutions. Student places are the number of additional first-year students who may be enrolled at these schools as a result of this facilities construction program.[b]

(a) A total of 21 schools received construction grants under this program in FY 71, while only five received FY 72 grants. This explains the substantial difference in obligation and expenditure figures for FY 72.

Federal Evaluation/Studies:

A 1971 Amendment Study--Health Professions Educational Assistance Act of 1963, as amended, P.L. 88-129 was carried out by the Bureau of Health Manpower Education, National Institutes of Health. This study was done in response to the problem of an accumulated backlog of approved but unfunded applications for construction and also in response to a need to devise an alternative means of providing construction financing. Such problems originated from a reduction in federal funds available for construction assistance.

The study, according to an abstract, concluded that loan assistance vehicles such as interest subsidies, annual interest subsidies, annual interest grants, and loan guarantees and insurance are not the most effective forms of credit assistance to the education and health community. Furthermore, loan assistance vehicles have been too widely and indiscriminately applied to most education and health community construction programs.

The following major recommendations involving revision of the Health Professions Act and alternate funding methods were intended to allow for greater program flexibility to meet present health manpower needs:

1. The Health Professions Program should retain its present form of providing support through direct construction grants.

2. The Act should include direct loan assistance, alone or to complement grant assistance according to the applicant's financial capability; and

3. Credit activities under the amended Act, if not on a departmental basis, should be financed through legislation enabling HEW to sell its own guaranteed obligations in the capital market.

Another evaluation, titled A Study of Health Facilities Construction Costs was completed by the Comptroller General and the General Accounting Office (GAO) in 1972 to meet a mandate of the 1971 Comprehensive Health Manpower Training Act, due to concern over the high cost of constructing health facilities. Information on the contents of this GAO report to Congress was taken from an abstract.

A broad-scale investigation of the factors affecting health facilities construction costs was undertaken, including facility planning processes, construction approaches, concepts, and standards, labor and materials, and whether constuction requirements might be reduced through use of, or reduced demand for, existing facilities. Special consideration was given to the impact which design and construction decisions have on operation and maintenance costs over the life of a facility, since initial costs of constructing a facility are relatively insignificant compared to the cost of operating the facility over its useful life.

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[b] HEW reports that no funds are requested for this program in the President's FY 74 budget and that the program authorization has expired.

The following includes some of the study's major findings:

1. Planning needs were identified in the finding that little or no attention was given to advance analysis of specific health care needs. Projects were concerned with crisis situations. Also deficient were cost estimates and the identification of alternative sources of funds.

2. Construction requirements under the Hill-Burton program, the major federal program providing funds for health facility construction, were not unnecessarily increasing costs.

3. The possible reduction of time connected with project delivery would allow earlier delivery of medical care and avoid increased project cost due to escalating costs in the construction industry.

4. The impact of productivity on health facility instruction is unknown, as there are no reliable means to measure this productivity. Certain federal requirements concerning minimum wages, safety, and equal employment opportunity may in the future have an impact on construction costs.

5. Concerning a reduction in demand for facilities or increasing productivity of existing ones, the GAO decided that unless the medical profession and individuals give more attention to illness and injury prevention, the current health care delivery system may become overburdened and perhaps unable to meet future health care demands.

6. An estimated 25 percent of the patient population is treated in facilities inappropriate to its needs. Also, the lengths of stay for specific types of illness were found to vary from area to area and may have been unnecessarily prolonged because of so-called less progressive medical customs and practices.

7. Sharing services among hospitals to free existing facilities for other purposes was suggested as another means by which demands for space could be met without construction.

8. Authorities have considered regional hospital systems as an effective way of organizing and utilizing scarce medical skills and facilities and of curbing increasing costs. However, to implement this method, they would have to deal with the contrary ideas of

complete autonomy and ready access to health services desired by communities, hospital officials, and physicians.

9. Often the inability of planning agencies to prevent unnecessary and costly expansion of facilities and services has been attributed to agencies or others lacking authority to enforce decision.

Also of some relevance to this program is an ongoing evaluation of facilities procurement under 23 health facilities programs. In addition, the continuing capital financing study concerning health facility construction relates to this program, as does the ongoing academic health center cost allocation studies.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

HEALTH PROFESSIONS TEACHING FACILITIES--LOAN GUARANTEES AND INTEREST SUBSIDIES (13.378)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 729, Part B, Title VII, as amended; 85 Stat. 433; 42 U.S.C. 293h

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$8,000,000	$ 0	$ 0

Program Objectives and Operations:

To assist nonprofit private entities to carry out approved construction projects for teaching facilities.

Monies may go into the construction of teaching facilities for nonprofit private schools of medicine, dentistry, osteopathy, pharmacy, optometry, podiatry, veterinary medicine, public health, or any combination of these. The program also assists in the construction of teaching hospitals or outpatient facilities affiliated with schools of medicine, osteopathy, or dentistry. No guarantee may apply except under special circumstances for more than 90 percent of construction costs or apply to more than 90 percent of loss of principal of and interest on loan. Interest subsidies are provided for up to 3 percent per annum on eligible loan interest.

Eligible Applicants:

Nonprofit private schools and teaching hospitals or outpatient facilities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

For FY 72, no institutions were supported, as the program was new and not yet operational.

Federal Evaluations/Studies:

No evaluations specifically applicable to this program have been developed. Of interest, however, is an evaluative study concerning federal construction assistance and credit programs authorized by the amended Health Professions Educational Assistance Act. This study is described on pp. 124.

A continuing evaluation of facilities procurement under 23 health facilities programs includes a study of this Teaching Facilities Loans program.

HEALTH PROFESSIONS TEACHING PERSONNEL--TRAINING, TRAINEESHIPS, AND FELLOWSHIPS (HEALTH PROFESSIONS TEACHER TRAINING) (13.385)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Section 769, Part D, Title VII, as amended; 42 U.S.C. 295, 85 Stat. 457

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$1,000,000	$604,000

Program Objectives and Operations:

To provide support for the advanced training of individuals to enable them to obtain or improve their teaching skills in the health professions field.

Grants may be used for program and traineeship costs at eligible health professions schools (or elsewhere). At least 75 percent of the funds must be used for traineeships and fellowships. Funds are available for expenditure during an approved budget period and may be renewed on an annual basis. There are no formula and matching requirements.

Eligible Applicants:

Public or nonprofit private accredited schools of medicine, dentistry, osteopathy, podiatry, optometry, pharmacy, or veterinary medicine which are accredited or have reasonable assurance of accreditation.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Awards were made to nine schools providing doctorate and postdoctorate training in FY 72. Schools of medicine assisted were the University of California, the University of Illinois, the University of Texas, Dallas, Harvard Medical School, and Wayne State University, a total of $630,000. The dental school at the University of Iowa received $204,751, while Texas College of Osteopathic Medicine received $14,200 and Michigan State College of Osteopathic Medicine was awarded $112,193. In addition, Ohio State College of Pharmacy was granted $38,583.

These funds will provide traineeships to approximately 45.5 full time equivalent students in FY 73.(a)

Federal Evaluations/Studies:

A continuing study of some relevance to this assistance program is an HEW evaluation of alternative approaches to collecting data on the availability of Health Professional Education and Training Programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

65.

(a) HEW reports that no funds are requested for this program in the President's FY 74 budget.

HEALTH SERVICES RESEARCH AND DEVELOPMENT--FELLOWSHIPS AND TRAINING (13.225)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301 and 304, P.L. 78-410 and P.L. 90-174, 42 U.S.C. 241 and 242b

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$5,000,000	$4,890,490	(a)

Program Objectives and Operations:

To establish, improve, or expand programs designed to train investigators in methods and techniques of conducting health services research and to raise the level of competence of individuals engaged in research.

Grants may include funds for direct costs (such as salaries, equipment, supplies, travel and trainee stipends and allowances) necessary to carry out an approved training program, as well as an indirect cost allowance of 8 percent of allowable direct costs. Fellowship awards provide stipend support, dependency allowances, tuition, and supply allowances.

Eligible Applicants:

Nonprofit institutions, such as universities and colleges, hospitals, state and local health departments, and other public or nonprofit private agencies, institutions or organizations. Profitmaking institutions are not eligible.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There are three programs: (1) University based training grants; (2) fellowships; and (3) career scientist awards. There were 48 university-based training grants awarded to support graduate students. In FY 72;

(a) Separate expenditures for this program are unavailable. These expenditures are included in the funds shown for Health Services Research and Development Grants and Contracts p. 133.

there were 347 total student slots provided with these funds. Those slots were composed of 321 predoctoral students, four masters, 18 postdoctoral, and four "special" students. The largest number of students trained were in the areas of medical sociologists, biostatisticians, medical care organization specialists, and behavioral scientists.

In addition, there were 87 persons holding research fellowship awards, including six research scientists who are still being supported (although this program has been discontinued as of June 30, 1971). The greatest number of students trained were medical sociologists, health economists, health services administrators, and medical care organization specialists.

Federal Evaluations/Studies:

There have been no national evaluations completed of this program.

HEALTH SERVICES RESEARCH AND DEVELOPMENT--GRANTS AND CONTRACTS (13.226)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301 and 304, P.L. 78-410 and P.L. 90-174; 42 U.S.C. 241 and 242b

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
$51,218,000	$51,228,981 (a)		$53,628,000 (a) (b)
	$31,976,050 (c)	PSE Grants	$31,104,240 (c)
	$19,252,931 (c)	PSE Contracts	$20,914,920 (c)

Program Objectives and Operations:

To support research, development, demonstration, and evaluation designed to improve health services. Priority is given to improve availability and quality of services, and to control costs. Projects are designed to develop and/or evaluate more effective and efficient ways of using manpower, equipment, facilities, and data. To improve quality control, organization, management, and financing of health services in communities, regions, and states.

Grants may include funds for direct costs necessary to carry out an approved project as well as funds for the reimbursement of applicable indirect costs.

Eligible Applicants:

States, political subdivisions, universities, hospitals, and other public or nonprofit private agencies, institutions, or organizations. Research project grants may also be awarded to individuals. Profit-making organizations are only eligible for contracts, not grants.

(a) These funds include contracts to private, profit-making agencies as well as nonprofit institutions.

(b) This figure includes Grants and Contracts as well as Fellowships and Training.

(c) This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There were a total of 262 active project grants under this program in FY 72. Projects were carried out in 40 states, with California, Massachusetts, and New York combined being the site for over 40 percent of these grants. Of these active projects, 190 were actually funded in FY 72. A total of 152 grants were held at postsecondary institutions.

In addition, there were 126 contracts awarded in FY 72. Of these, 62 were awarded to postsecondary education institutions.

Federal Evaluations/Studies:

There have been no national evaluations completed of this program.

HEALTH STATISTICS TRAINING AND TECHNICAL ASSISTANCE (13.227)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, as amended, Sec. 301, 305, 311, 312(a), 313, and 315; 42 U.S.C. 241, 242c, 244, 245 and 247

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$500,000	$425,000

Program Objectives and Operations:

To provide training and technical assistance to state and local health and statistical agencies through advisory services and counseling from the National Center for Health Statistics and the Applied Statistics Training Institute. Training and technical assistance are restricted to government agencies, health and health-related institutions, and individuals who have a legitimate interest in public health statistics.

Eligible Applicants:

State and local health and statistical agencies and health-related institutions are eligible for technical assistance and advisory services. Personnel of these agencies and institutions are eligible for short-term training courses.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The National Center for Health Statistics (NCHS) conducts a program of training in applied health statistics methods through the Applied Statistics Training Institute (ASTI). In FY 72, ASTI offered 24 courses and served 365 students from 41 states, the District of Columbia, Guam, and Canada. In addition, 182 persons attended cause-of-death coding courses, which are highly technical but are a part of elementary training for state health workers. These courses are kept separate from the other 24 courses, which are not as specific.

FY 73 information shows 28 courses being offered to approximately 500 students. One reason for the increase in courses is the decentralization of course locations.

Federal Evaluations/Studies:

There have been no national evaluations done on the Health Statistics Training and Technical Assistance. ASTI within NCHS does use questionnaires asking students to evaluate the course at its completion. A few months later the students are asked to evaluate the course to see how it is helping them apply what they have learned.

A more general evaluation, Health Statistics Today and Tomorrow was completed in 1972. This evaluation does not relate directly to Health Statistics Training and Technical Assistance. However, it does evaluate the role of the National Center for Health Statistics in providing health information. The Committee Report discusses current health statistics, including population, health status and manpower, health care facilities, and data problems. The future of health statistics includes a system of national health accounts, cooperative statistics system, training activities, program development, methodology, and management and operations. This study was done for the Health Services and Mental Health Administration by an expert panel assisted by Moshman Associates, Inc.

NURSE SCIENTIST GRADUATE TRAINING GRANTS (GRANTS FOR TRAINING NURSE-SCIENTISTS) (13.362)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$700,000	$534,067

Program Objectives and Operations:

To expand doctoral programs in university departments of basic science, and to provide tuition and training stipends to nurses who are studying full-time toward doctoral degrees in the biological, physical, or behavioral sciences.

Funds are used to provide student assistance and faculty support, but not for construction and travel. Assistance can last up to five years. There are no formula or matching requirements.

Eligible Applicants:

Graduate schools of nursing with the necessary resources for doctoral training in the basic sciences.

Primary Beneficiaries:

Registered nurses with baccalaureate degrees.

Available Program Data:

Grants were made to 9 institutions in FY 72, and stipends were given to 109 registered nurses.

Federal Evaluations/Studies:

No evaluations specifically applicable to this program have been conducted.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSE TRAINING IMPROVEMENT--SPECIAL PROJECTS GRANTS AND CONTRACTS (13.359)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VIII, Section 805, as amended by Section 3 of P.L. 92-158

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$20,000,000	$20,692,167	$6,950,000

Program Objectives and Operations:

To help schools of nursing and nonprofit organizations improve the quality and availability of nursing education through projects in special areas of concern.

Funds used for salaries of personnel specifically employed for the project; consultant fees; supplies and equipment necessary to conduct the project; essential travel expenses; operating expenses, such as executive and administrative costs; accounting; building maintenance and janitorial services, utilities and other expenses. No formula or matching requirements exist.

Eligible Applicants:

Public or nonprofit private organizations as well as diploma, associate, baccalaureate, and higher degree programs of nursing education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Continuing education programs are included among eligible applicants. Education for primary care responsibilities is included in the developmental interests of the program.

In FY 72, 229 special projects were undertaken by 223 schools and 6 agencies. During this time, 15 contracts for nurse practitioner training were awarded at 14 schools; one medical care development contract was also awarded.

Federal Evaluations/Studies:

There are no completed evaluations directly concerning this program. However, an ongoing study evaluating the application of instructional technology in selected basic nursing education programs, including those supported by Special Project Grants, is relevant.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING CAPITATION GRANTS (13.386)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Nurse Training Act of 1971, Section 4, P.L. 92-158, which amends and extends Section 806, Title VIII of the Public Health Service Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$78,000,000	$31,500,000	$0

Program Objectives and Operations:

To increase nursing school enrollments and the supply of nurse practitioners (e.g., nurse midwives, family health nurses, other primary care roles).

Funds are awarded to provide a support base for the educational programs of nursing schools. Funds are limited to schools that provide assurances that they will increase enrollment, undertake projects to improve nursing education and the utilization of nursing skills, and maintain financial effort at prescribed levels. Funds not to be used for construction, financial assistance to students, research or patient care not necessary for the educational program of the school, hospital bed costs, operating deficits of teaching hospitals, and other costs not integral to student education. There are formula requirements and assurances for this program.

Eligible Applicants:

Nursing schools.

Primary Beneficiaries:

Nursing schools and their student nurses.

Available Program Data:

Of the 875 participant nursing education programs in FY 72, 3 were at the doctorate level; 52 on the master's level; 247 on the undergraduate level; 310 provided for associate degrees; and 263 provided for RN diplomas. HEW reports that phase out of this program is expected in FY 74.

Federal Evaluations/Studies:

In progress is a study on the effectiveness of capitation grants in increasing nurse production. Also related to this program is an ongoing evaluation of nurse practitioner programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING PROFESSIONS--TALENT UTILIZATION (13.387)

Federal Agency:

HEW: Health Resources Administration
Development

Authorizing Legislation:

Nurse Training Act of 1971, Section 8; P.L. 92-158 which amends and extends Section 868, Title VIII of the Public Health Service Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$3,500,000	$1,964,761	$20,232

Program Objectives and Operations:

To establish programs to accomplish accelerated recruitment for nursing education.

Grants and contracts are authorized to recruit individuals, particularly those from disadvantaged groups or having prior health service experience, for nursing education. These funds may also be used for publicizing to practical nurses sources of aid for professional nursing education and for establishing programs to enhance and facilitate enrollment, pursuit, and completion of nursing education. There are no formula and matching requirements.

Eligible Applicants:

Public or nonprofit private health or educational entities.

Primary Beneficiaries:

Persons with potential for education in the nursing profession, including veterans of the Armed Forces, individuals from disadvantaged backgrounds, and persons with prior health service experience, particularly practical nurses.

Available Program Data:

Training is provided on the baccalaureate, associate degree, diploma, and certificate levels. In FY 72, 12 contract awards were made. In addition, six awards went to educational and community agencies; six went to baccalaureate and associate degree nursing programs; and seven grants were made to baccalaureate, associate degree, and diploma schools of nursing. HEW reports that phase out of this program is expected in FY 74.

Federal Evaluations/Studies:

While there are no evaluations directly applicable to this program, those studies described on p. 146 are indirectly related. In progress is a relevant study of the cost effectiveness of nursing education programs and an evaluation of the student selection process in nursing.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING RESEARCH PROJECT GRANTS (13.361)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,438,559	$1,538,000

Program Objectives and Operations:

To improve education for nursing practice through scientific investigations.

Funds are to be used to solve problems in nursing education and practice, to support conferences on the communication of research findings, and to enable institutions to strengthen their research efforts and overcome research obstacles. Legislation requires grantee to participate in cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

Institutions of higher education qualified to conduct independent research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

About three-fourths of the principal investigators in nursing research projects are nurses; such projects are also conducted by interdisciplinary teams that include behavioral scientists, physicians, industrial engineers, and hospital administrators. In FY 72, 52 grants were made to institutions.

Federal Evaluations/Studies:

There are no particular evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING SCHOLARSHIPS (13.363)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VIII, Section 860, as amended by Section 7 of 92-158; 42 U.S.C. 298c(d)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite/formula	$19,489,068	$17,856,000

Program Objectives and Operations:

To increase the nurse supply by: (1) recruiting greater numbers of students, including members of disadvantaged groups and persons with previous health service experience; and (2) helping students in financial need to pursue courses in nursing education.

Scholarship awards are made to full- and half-time nursing students who are U.S. citizens or have been admitted to the U.S. for permanent residence and who require aid to enter and complete a program of nursing education. Money is provided on formula basis to nursing institutions to capitalize scholarship funds. Scholarships are not to exceed $2,000 a year, after which a student may reapply until that time required to complete preparation for practice. No matching is required.

Eligible Applicants:

All public and private nonprofit schools of nursing that prepare students for practice as registered nurses--i.e., associate degree programs, baccalaureate or higher degree programs, and diploma schools--and meet accreditation requirements of the Nurse Training Act, 1971.

Primary Beneficiaries:

Full- or half-time nursing students who are in good standing or have been admitted into a nursing education program.

Available Program Data:

In FY 72, 308 scholarships were awarded at the level of diploma programs in nursing; 399 scholarships went to students training for associate degrees; 276 scholarships were awarded for study leading to a baccalaureate degree; and 36 scholarships went toward graduate study.

Student Scholarships Statistical Summary[a]

1972

Total number of nursing programs	1,443
Number of programs participating	1,019
Total enrollments (all programs)	201,000
Number of students assisted	19,500
Percent of enrollment assisted	9.7
Average scholarship awarded	$1,000

Federal Evaluations/Studies:

No specific evaluations directly relating to this program have been undertaken. However, several ongoing studies are indirectly relevant, including a study of attitudes and concepts on nursing of high school seniors and an evaluation of the student selection process in nursing. An additional ongoing evaluation of primary objectives of the long-term Professional Nurse Traineeship and Special Nurse Fellowship programs is also of interest.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

57, 67.

NURSING SCHOOL CONSTRUCTION (13.369)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VIII, sections 801 and 802, as amended by Section 2 of the Nursing Training Act of 1971, P.L. 92-158.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$35,000,000	$11,887,500	$24,447,000

Program Objectives and Operations:

To increase the number of nurses and improve the quality of education for nursing practice by providing: (1) federal assistance for the construction of facilities for schools of nursing, including interim facilities and/or replacement, renovation, expansion, or equipping of such facilities; (2) guarantees of up to 90 percent of nonfederal construction loans to nonprofit private nursing schools; (3) interest subsidies to reduce by up to 3 percent of the interest rate on construction loans.

Federal participation for new schools or major expansion may be up to 75 percent of the total eligible cost for construction, including cost of equipment necessary for the functioning of facilities.

Eligible Applicants:

Collegiate, associate degree, or diploma nursing school accredited by an approved association or agency.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There is a general limit of 67 percent federal participation for replacement, renovation, or minor expansion of nursing education facilities. Assistance is given until that time required for completing the construction project.

Grants are awarded for facilities providing training for a baccalaureate, master's, associate degree or diploma in nursing. For the 21 nursing education programs supported in FY 1972, 1,136 new first-year student places were established, and 3,849 student places were maintained. Monies were distributed through 18 states. HEW reports that only interest subsidies are expected to be available by FY 74.

Federal Evaluations/Studies:

The ongoing evaluation of facilities procurement under 23 health facilities programs includes an examination of the Nursing School Construction Grant and Loan Program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING SCHOOLS--FINANCIAL DISTRESS GRANTS (13.388)

Federal Agency:

HEW: Health Resources Administration, Bureau of Health Resources Development

Authorizing Legislation:

Nurse Training Act of 1971, Section 3; P.L. 92-158, which amends and extends Section 805, Title VIII of the Public Health Service Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$8,289,573	$287,000

Program Objectives and Operations:

To help nursing education programs in serious financial straits maintain quality nursing education or meet accreditation requirements.

Funds may be expended for any operational costs which the school judges will efficiently maintain quality programs or for special costs to achieve accreditation. These funds may not be paid for or transferred to the grantee's parent institution except for specific services provided for by that institution. There are no formula or matching requirements.

Eligible Applicants:

Public or other nonprofit schools of nursing that are accredited or that have reasonable assurance of accreditation.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Grants also help nursing schools in dire need to remain in operation at least long enough to graduate students already enrolled. Qualifying training levels comprise diploma, associate, baccalaureate, and master's degrees. Aid went to 125 nursing schools under this program in FY 72. A total of 52 baccalaureate schools, 38 associate degree schools, and 35 diploma schools received these funds. HEW reports that phase out of this program is expected in FY 74.

Federal Evaluations/Studies:

No evaluations directly relating to this program have been completed. However, a study of the cost effectiveness of nursing education is in progress.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

NURSING STUDENT LOANS (13.364)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VIII, section 822 as amended by section 6 of P.L. 92-158; 42 U.S.C. 297a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$25,000,000	$20,928,375	$20,928,000

Program Objectives and Operations:

To increase educational opportunities for students in need of financial assistance to pursue a course of study in nursing education by providing long-term, low-interest loans with cancellation entitlements.

Loans have a maximum of $2,500 annual and $10,000 total; for full-time and half-time nursing students who are citizens of the U.S. or who have been admitted to the U.S. for permanent residence. Grants are made to schools of nursing to capitalize loan funds. Schools receiving loan funds must match federal contribution with an amount not less than one-ninth of the federal allotment. Loans are made available for the length of time required to complete preparation for nursing practice.

Eligible Applicants:

All public and nonprofit private nursing schools that award diplomas or degrees, prepare students for practice as registered nurses, and meet accreditation requirements.

Primary Beneficiaries:

Nursing students.

Available Program Data:

Up to 85 percent of loans to nursing students may be cancelled under certain conditions of employment as a registered nurse after graduation from a nursing education program. Consultation and technical assistance are provided for nursing education institutions wishing to share in loan funds. Participating students may study for masters's, baccalaureate, or associate degrees or other levels such as diploma RN. In FY 72, loans were distributed to 45 states, the District of Columbia, Puerto Rico, and the Virgin Islands.

Student Loans Statistical Summary(a)
1972

Total number of nursing programs	1,443
Number of programs participating	1,003
Total enrollments (all programs)	201,000
Number of students assisted	30,000
Percent of enrollment assisted	15.0
Average loan requested	$1,035
Average loan awarded	$700

Federal Evaluations/Studies:

One HEW study indirectly related to this program is *Investigation and Evaluation of Employment Opportunities for Newly Licensed Nurses*, which was unavailable at the time of this compilation. Also, a study of the cost effectiveness of nursing education programs is an ongoing project which will provide information about the program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

57, 67.

(a) Data from U.S. Department of Health, Education, and Welfare. *Justifications of Appropriation Estimates for Committee on Appropriations Fiscal Year 1974*, (Vol. V), Washington, D.C.: National Institutes of Health, n.d.

PROFESSIONAL NURSE TRAINEESHIPS (13.358)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title VIII, Section 821, as amended by Section 5 of P.L. 92-158; 42 U.S.C. 297

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$20,000,000	$11,470,000	$9,965,000

Program Objectives and Operations:

To increase the number of registered nurses with preparation for positions as administrators, supervisors, nursing specialists, and teachers in hospitals, public health agencies, and schools of nursing.

Funds are used to provide for long-term, full-time academic study in universities and colleges, and for short-term intensive study (five to thirty days) in courses sponsored by public or private nonprofit educational institutions and health agencies to update the knowledge and skills of nurses in leadership positions. Long-term trainees may receive up to a limit of 12 months' aid for baccalaureate study, up to 18 months for post-baccalaureate, and up to 12 months for post-master's study. The total maximum is 24 months of study. There are no matching formula requirements.

Eligible Applicants:

Schools of nursing in universities and colleges for long-term, full-time study; public and private nonprofit institutions and agencies for short-term intensive study.

Primary Beneficiaries:

Graduates of state-approved schools of nursing, licensed as professional nurses in a state or possession of the U.S.

Available Program Data:

In FY 72, 121 educational institutions and nine educational organizations received support for an estimated 3,800 nurses in 41 states, Puerto Rico, and the District of Columbia.

Federal Evaluations/Studies:

There are at least two recent general studies of nursing programs. Information from the abstracts is presented here.

Nursing Manpower Programs, completed by HEW in FY 68, was a goals achievement analysis of federal programs which sought to increase the supply of professional nurses. The study recommendations suggest promoting a more equitable geographical distribution of professional nurses as well as increasing the aggregate supply. The study also makes suggestions for improving the utilization and productivity of professional nurses.

Another study completed by HEW, A Progress Report on Nurse Training--1970, examined the impact of the 1964 Nurse Training Act and the 1968 Health Manpower Act on the progress of and needs for nursing education and services. Such a review was required for the preparation of a request to Congress to continue or revise legislation authorizing nursing programs.

Subjects covered by the report included construction of new educational facilities and replacement of outmoded ones; strengthening and expanding curricula; the effect of broadened authority of new legislation in resolving problems; new information on the effects of the provisions for student financial assistance; and updated information on the supply and distribution of nurse personnel. A review was made of all available data, particularly data found in a study conducted by the National Commission for the Study of Nursing and Nursing Education.

Major findings and recommendations included:

1. Accomplishments under the Legislation:

Between January 1965 and 1970, the total number of nursing programs increased by 181 programs, and 72 percent of the total of 1,339 programs in 1970 met professional accreditation standards necessary to qualify for federal aid. More than 5,000 new first-year places were built in nursing schools, anticipated to accommodate a total of 100,000 additional first-year students over the 20-year period during which teaching facilities were to be used. All in all, 132 schools received 169 grants worth $15.4 million and 200 additional schools benefited from these projects. During the five years of the Nurse Training Act, the Professional Nurse Traineeship Program provided aid to 11,093 registered nurses for long-term training and to 19,000 for short-term training. The number of low-interest loans made to needy students totaled more than 84,000.

2. Issues in the General Field of Nursing:

As there is a growing trend toward out-of-hospital nursing care, such as in extended-care facilities and home-care programs, the nursing profession is facing the problem of redistributing itself to keep abreast of changing patterns of health care, as well as the needs and distribution of the population.

The nature of nursing as a presently predominantly female profession poses peculiar problems of attrition, mobility, and recruitment. Efforts were being made to counteract the estimated 3 percent net attrition rate by attracting back into the labor force those nurses who had left to marry and raise families. Other problems include a need to facilitate advancement and rectify unfavorable salaries, working conditions, inefficient utilization of nursing skills, and poor management policies in administration of nursing service. Nursing also has problems that are common to any health profession--for example, deficiencies of program, faculty, and facilities in educational institutions, and needs for aid to students preparing for practice and leadership positions, and more highly skilled clinical specialists for new complex types of patient care (such as cardiac surgery and kidney dialysis). Most critical is a shortage in nurses trained for leadership and specialized positions.

3. Quality of Nursing Care (Educational Preparation of Nursing Personnel):

The quality of nursing care was considered to be enhanced when greater numbers of nurses would be able to maintain the traditional vital link in patient care and assume new levels of responsibility in collaboration with physicians. The study noted that quality nursing is related to quality educational preparation for the field. Graduates of baccalaureate programs with advanced training were the only nurses immediately qualified for clinical specialization, teaching, administration, and other leadership positions.

In addition, those studies described under the Nursing Scholarship Program (p. 146) are indirectly related to this traineeship program. An ongoing study of interest which has not yet been completed is an evaluation of primary objectives of the long-term Professional Nurse Traineeship and Special Nurse Fellowship programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

PROFESSIONAL PUBLIC HEALTH PERSONNEL--TRAINEESHIPS (PUBLIC HEALTH TRAINEESHIPS) (13.366)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 306(a), P.L. 78-410, as amended; 42 U.S.C. 242 (d)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$16,000,000	$8,389,973(a)	$5,147,000(a)
	$7,843,000(b)	$4,787,000(b)

Program Objectives and Operations:

To increase the supply of qualified public health manpower, bring additional health personnel into public health, and increase public health contribution of professional health personnel through student financial assistance.

Funds support short-term traineeship in special programs of continuing education in community and environmental health and long-term support of students taking postprofessional academic training in health services organization and delivery. Assistance is limited to tuition, fees, stipends, and dependency and transportation allowances for students. Except for the General Purpose Traineeship Grants, there are no formula or matching requirements.

Eligible Applicants:

Agencies, institutions, and organizations that offer graduate or specialized training in public health.

Primary Beneficiaries:

Individuals who have completed their basic professional education and whose skills are needed in modern public health practice, such as physicians, nurses, engineers, statisticians, nutritionists, and others.

(a) Includes funds for both agencies and postsecondary institutions.

(b) Estimated funds going to postsecondary institutions, excluding agencies. This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

The levels of training assisted under this program include baccalaureate, post-baccalaureate, master's, doctorate, postdoctorate, and public health apprenticeships.

At least seven different types of traineeships were proveded under this program in FY 72. (1) Special Purpose traineeship grants were awarded to 97 institutions in 43 states and Puerto Rico, totaling $3,618,953. (2) General Purpose traineeship grants amounting to $2,270,000 went to 17 universities in 14 states and Puerto Rico on a formula basis. These grants are only for full-time graduate students. (3) Funds for apprenticeship training ($604,092) were distributed to 63 training institutions to support 690 traineeships. Both academic institutions and official agencies were supported. A total of 37 schools of medicine received funds for 406 traineeships. Grants went to 10 schools of dentistry to assist 52 trainees. Five schools of public health received support for 48 trainees. Five State health departments financed 94 traineeships, and six local health departments financed 90 traineeships from grants. (4) The amount awarded to 36 institutions, including 18 official agencies, for 106 Residency Traineeships in 24 states totaled $689,949. (5) Short-Term Grants amounting to approximately $590,100 went to 99 programs in 39 academic institutions and 21 official agencies. (6) A total of 22 academic institutions received $562,279 in the form of 25 grants to support 147 traineeships in environmental health. (7) Finally, a total of 13 grants ($54,528) was awarded to 13 schools for 24 traineeships under the Public Health Nurse Traineeship portion of this program.

On June 30, 1973, authorization for this program sponsored by the Division of Allied Health Manpower expired.

The program received a one-year extension. However, no appropriation for funding has been made. Only continuation grants are now being funded.

Federal Evaluations/Studies:

An evaluation of the Public Health Training Grants is currently in progress, with early data phases completed. Additional studies relating generally to this program are under way and are expected to be complete by Fall, 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

SCHOOLS OF PUBLIC HEALTH--GRANTS (HILL-RHODES GRANTS) (13.370)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 309 (c), P.L. 78-410, as amended; 42 U.S.C. 242g

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$12,000,000	$5,509,000	$5,028,000

Program Objectives and Operations:

To assist schools of public health to provide comprehensive professional public health training and specialized consultative services and technical assistance in the administration of state and/or local public health programs.

Grants are used for support of faculty, supporting staff, equipment, and other costs of maintaining a teaching program for public health or providing specialized consultative services and technical assistance to state and/or local public health programs. Funds for this program are distributed on a formula basis.

Eligible Applicants:

Accredited schools of public health.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Grants may not be used for: (1) construction (except for minor renovations and repairs); (2) international travel; (3) stipends; (4) tuition; (5) fees; or (6) student travel expenses.

The grants are meant to offset a portion of the difference between tuition income and the cost of educating federally sponsored students. Occupations supported include dentistry, health administration, health education, nursing, physiology, sanitation, statistics and others. The range of training levels supported comprises the baccalaureate through doctorate degree study to resident, postdoctorate, and continuing educational work on all levels. In FY 72, formula grants went to 17 institutions assisting a total of 4,886 students.(a)

(a) HEW reports that this program is being terminated in favor of noncategorical health manpower training programs.

Federal Evaluations/Studies:

A general evaluation considering alumni of public health schools is currently under way and is indirectly related to this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

SPECIAL PREDOCTORAL AND POST-DOCTORAL FELLOWSHIPS IN NURSING RESEARCH (13.360)

Federal Agency:

HEW: Health Resources Administration

Authorizing Legislation:

Public Health Service Act, Title III, Section 301 (c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$649,639	$526,000

Program Objectives and Operations:

To prepare nurses to do independent research to improve the nursing care of patients, to collaborate in interdisciplinary research, and/or to stimulate and guide research of importance to nursing.

Nurses with demonstrated research potential are supported for the period of time needed to complete their research preparation. Fellows receive annual tuition in advance and monthly stipends, and must reapply annually for continued support. There are no formula or matching requirements.

Eligible Applicants:

Registered nurses with baccalaureate degrees.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Grants are given to nurses with a baccalaureate degree for doctoral and post-doctoral level training. In FY 1972, 159 Special Nurse Fellows were supported by the program.

Federal Evaluations/Studies:

No specific evaluations directly relating to this program have been completed.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

67.

CRIPPLED CHILDREN'S SERVICES (CC) (13.211)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$62,192,655 PSE $ 5,272,614(a)	$42,912,932 PSE $ 3,638,103(a)

Program Objectives and Operations:

This program provides financial support to states (1) to extend and improve medical and related services to crippled children and children suffering from conditions that lead to crippling, and (2) for special projects of regional or national significance which may contribute to the advancement of services for crippled children.

State crippled children's agencies submit certifications that meet the conditions of plan approval specified in the Social Security Act and that assure high quality of service. These documents are approved by the regional health directer, who makes final decisions pending compliance with new policies.

Eligible Applicants:

Formula grants are available to state crippled children's agencies. Project grants are available to state crippled children's agencies and to institutions of higher learning.

Primary Beneficiaries:

Children under 21 years of age who are crippled or are suffering from conditions that lead to crippling. Trainees in the health professions.

Available Program Data:

In FY 72, there were a total of 101 Crippled Children's (CC) projects involving postsecondary education. These projects were carried on in 64 institutions of postsecondary education. The total amount of Special Projects grant awards to CC services in FY 72 was $5,272,614.(b) In addition to these Special Projects (grants), there are formula grants which are distributed by the states, with one formula grant being given to each of the states and several territories. There were 54 formula grants awarded in FY 72.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

There have been no national evaluations of Crippled Children's Services.

(b) This figure is an approximate obligation figure provided by Maternal and Child Health Services.

EMERGENCY HEALTH--COMMUNITY PREPAREDNESS (13.214)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Federal Civil Defense Act of 1950, Section 201(h); 50 U.S.C. 2281(h); Public Health Service Act, Section 301 and 311; 42 U.S.C. 241, 243

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,533,578	$1,528,229

Program Objectives and Operations:

To reduce mortality, morbidity, and period of convalescence by improving the organization and delivery of emergency health and medical services. Training and education programs are conducted on national, regional, state, and local levels to provide instruction in emergency health preparedness. Limited funding is available through the contract mechanism for developmental studies relating to guidelines and standards for training of ambulance and hospital emergency services, and equipment of emergency vehicles and hospital emergency departments. There are no matching requirements.

Eligible Applicants:

State and local health departments, medical and paramedical professional organizations.

Primary Beneficiaries:

The general public.

Available Program Data:

In FY 72, the number of hospital staffs trained in the use of Packaged Disaster Hospitals was 273. There were seven additional communities over 25,000 meeting preparedness standards. The number of Hospital Emergency Department staffs trained was 251. There were 17,632 Emergency Medical Technician-ambulance staff trained. The total number of persons trained was 18,156.

Federal Evaluations/Studies:

An evaluation entitled Evaluation Studies of Training Programs for Emergency Health Services was completed in 1967. According to an HEW abstract, this study looked at training programs and materials of medical self-help course, professional training, packaged disaster hospitals, and community emergency health services planning, in the Division of Health Mobilization.

A more recent study which relates to the Emergency Health Community Preparedness Program is A Study of the Nature and Function of Emergency Medical Services Advisory Councils--Summary and Recommendations, undertaken on contract by Martin D. Keller and William R. Gemma at Ohio State University in March 1973.

The authors point out that the components of the emergency health care system do not fall into place automatically. Medical and personnel frequently operate with little coordination among other components of the emergency health care system.

One possible answer to the problem of fragmentation and lack of coordination is the development of Emergency Medical Services Advisory Councils (EMSAC's). Presently, an EMSAC is defined as any council, committee, or group of individuals whose purpose it is to coordinate the components and improve the provision of emergency medical care to the area population. They were often formed to bring together key professional and administrative leaders in an organizational framework that could tie together the various components of the Emergency Medical Service (EMS) and improve the delivery of emergency care.

The purpose of the study was to identify active EMSAC's in the United States and to assess their impact on the EMS systems of the communities. This included a study of federal financing of EMS projects, in order to determine whether the existence of an EMSAC influenced the number of federal projects awarded and their mean dollars. The study was charged with analysis of the following areas: 1) distribution of federal funding by project type in areas with and without EMSAC's; 2) types of activities reported by the responding EMSAC; and 3) self-assessment of EMSACs regarding their present and future potential.

The authors obtained a list of all EMSACs and made contact with all identified organizations. Questionnaires and telephone calls elicited information on structure, activities, and assessments of accomplishments as well as future potential. Census figures provided population size for the identified EMSAC and non-EMSAC counties. Site visits were made to clarify the nature of information. The data obtained, various analyses, and the site visit experience of the investigators formed the basis for the study's findings and recommendations.

In general, the study showed that the existence of an EMSAC significantly influenced federal funding of EMS projects in the area. Influence and involvement of EMSACs appeared greater in large population areas. Complex inter-actions of community size, funding of projects of different types, and mean dollar amount for different projects were found to exist.

Activities of the particular EMSAC were studied and generally fell into the categories of emergency facility operations, communications, ambulances and equipment, and training and education.

The study's summary reports that EMSAC representatives believed they were effective in improving local emergency medical services, without regard to the population size and EMS availability in the area. Emergency communications were determined to be the most pressing need. The EMSAC's greatest potential was thought to be in the areas of planning and coordination of EMS activities while EMSAC representatives considered that organization weakest in the implementation of projects and in the evaluation of the current status of EMS. Recommendations include a general need for a locus of authority and control, and a definable organization (or organizational structure).

The study concludes that the EMSACs have fulfilled their role as coordinating bodies; have been effective in attracting funds from federal agencies to their communities; and have provided a focus of authority, control and planning. The authors note that trends since the completion of the study indicate EMSACs are being formed nationwide at an increasing rate. The tendency is also for them to become linked with, or part of, area wide comprehensive health planning agencies. In conclusion, the study notes that all communities with inadequate services need this type of council. The EMSAC could then be the center around which all of the components of the system are coordinated.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

55.

FAMILY PLANNING SERVICES--TRAINING GRANTS AND CONTRACTS (13.260)

Federal Agency:

HEW:, Health Services Administration

Authorizing Legislation:

Public Health Service Act as amended, Title X, Section 1003, P.L. 91-572; 42 U.S.C. 300

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$3,000,000	$2,000,000(a) $ 986,000(b)	$2,000,000(a) $ 988,000(b)

Program Objectives and Operations:

To provide training for personnel to improve the delivery of family planning services. Grants are awarded to develop preservice and inservice training for project staff.

Eligible Applicants:

Public or nonprofit private entities. Grants are also available to individuals for training personnel to carry out family planning service programs.

Primary Beneficiaries:

Family planning or other health services delivery personnel.

Available Program Data:

A total of 23 grants and contracts were initiated in FY 72. Of the 16 grants, three went to the following postsecondary institutions: the University of Puerto Rico, Emory University, and the University of Kansas Medical Center. Of the seven contracts awarded, one went to a postsecondary institution, Tulane University's School of Public Health and Tropical Medicine.

Federal Evaluations/Studies:

There have been no national evaluations of the Family Planning Services-Training Grants program.

(a) These obligations and expenditures are for grants.

(b) These obligations and expenditures are for contracts.

HEALTH CARE OF CHILDREN AND YOUTH (CHILDREN AND YOUTH PROJECTS) (13.218)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act, as amended, Title V, Section 509, P.L. 89-97

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$47,367,624	$34,578,366

Program Objectives and Operations:

To provide comprehensive health care and services for children in low-income areas. The grants may be used for the provision of health services. Funds may not be used for purchase or construction of buildings or for salaries of personnel paid from other federal grant funds.

Eligible Applicants:

These grants are available to the state health agencies or, with the consent of such agencies, to health agencies of any political subdivision of the state, to the state crippled children's agency, to any school of medicine, and to any teaching hospital.

Primary Beneficiaries:

Children and youth of school and preschool age who would otherwise not receive these services because they are from low-income families or for other reasons beyond their control.

Available Program Data:

In FY 72, there were 59 children and youth projects located in 30 states, the District of Columbia, the Virgin Islands, and Puerto Rico. The average project cost in FY 72 was $802,841. Each served a specific low-income area. Two-thirds of the projects and nearly 90 percent of the children enrolled were in inner cities. In FY 72 there were 18 active grants to universities.

Federal Evaluations/Studies:

Minnesota Systems, Inc. does an annual program profile which provides comparative data on projects, according to the Health Services Administration.

INTENSIVE INFANT CARE PROJECTS (NEWBORN CARE) (13.230)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act, as amended, Title V, Section 508(a)(2), P.L. 88-156

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$753,000	$549,690

Program Objectives and Operations:

To provide necessary health care to newborn infants who have health conditions or are in circumstances which increase the hazards to their health and who would not otherwise receive such care. Grants may be used for the support of hospital intensive care units for high-risk newborn infants.

Eligible Applicants:

These grants are available to the state health agencies, or with the consent of such agencies, to health agencies of any political subdivision of the state, and to any other public or nonprofit agency or organization.

Primary Beneficiaries:

Infants as described above.

Available Program Data:

In FY 72, the Maternal and Child Health Service supported intensive care units which served infants from the sponsoring hospitals in a given city, county, state, or several states. Project locations included Alaska, California, Mississippi, Missouri, Pennsylvania, Tennessee, Texas, and Utah. In FY 72 there were four grants active at universities.

Federal Evaluations/Studies:

According to program officials, reports from the original five projects give evidence that the intensive care offered in special hospital units can significantly reduce mortality among premature infants. However, no national evaluations of the program have been made.

MATERNAL AND CHILD HEALTH RESEARCH (CHILD HEALTH RESEARCH GRANTS PROGRAM) (13.231)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act, as amended, Section 512, P.L. 90-248; 42 U.S.C. 712

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$5,823,266 PSE \$4,198,575(a)	\$3,086,331 PSE \$2,225,245(a)

Program Objectives and Operations:

To provide research projects relating to Maternal and Child Health Services or Crippled Children's Services which show promise of substantial contribution to the advancement of such services.

It is required that each applicant finance as large a part of the project cost as possible, so that a maximum number of projects may be supported by available federal funds.

Eligible Applicants:

Grants may be made to public or other nonprofit institutions of higher learning and to public or other nonprofit agencies and organizations engaged in research or in maternal and child health or crippled children's programs.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, there were a total of 63 projects active. In all, 30 postsecondary institutions and 45 projects relating to postsecondary education were included.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

There have been no nationwide evaluations of the Maternal and Child Health Research Program.

MATERNAL AND CHILD HEALTH SERVICES (MCH) (13.232)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$59,079,000 PSE $ 3,905,466(a)	$40,764,510 PSE $ 2,694,771(a)

Program Objectives and Operations:

To provide financial support (1) to states to extend and improve services (especially in rural areas and in areas suffering from severe economic distress) for reducing infant mortality and improving the health of mothers and children, and (2) for special projects of regional or national significance which may contribute to the advancement of Maternal and Child Health Services.(b)

One-half of the Maternal and Child Health funds is apportioned among the states by a formula specified in the law (Section 503(1)), with each state matching that amount dollar for dollar. The other half of the funds consists of an amount administratively allocated for special projects and an amount apportioned among the states according to the financial need of each state for assistance in carrying out its state plan. No matching is required for these funds.

Eligible Applicants:

Formula grants are available to state health agencies. Project grants are available to state health agencies and to institutions of higher learning.

Primary Beneficiaries:

Mothers and children in need of health care and trainees in the health professions.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Apportioned among the states according to the financial need of each state for assistance in carrying out its state plan. No matching is required for these funds.

Available Program Data:

For FY 72, there were a total of 69 Maternal and Child Health Services projects involving postsecondary education. These projects were carried on by 64 institutions of postsecondary education. The total Special Projects amount of grant awards in FY 72 was $3,905,466. In addition to these special projects, there were formula grants distributed by state, with one being given to each state and several territories. There were 54 formula grants active in FY 72.

Federal Evaluations/Studies:

There have been no national evaluations of the Maternal and Child Health Services Program.

MATERNAL AND CHILD HEALTH TRAINING (13.233)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act, as amended, Title V, Section 511, P.L. 90-248; 42 U.S.C. 711

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$15,066,000 PSE $12,286,000(a)	$7,984,980 PSE $6,547,683(a)

Program Objectives and Operations:

To train personnel for health care of and related services for mothers and children, particularly mentally retarded children and children with multiple handicaps.

These grants may be used to provide support for faculty, traineeships, services, clinical facilities, short-term workshops and institutes, and related support items. Funds may not be used for support of noncitizens, for foreign travel, construction, or entertainment.

Eligible Applicants:

Public and other nonprofit institutions of higher learning.

Primary Beneficiaries:

Trainees in the health professions and handicapped children who receive services provided through the training programs.

Available Program Data:

In FY 72, there were a total of 34 projects, of which 32 were carried on at postsecondary institutions. Training is provided through University-Affiliated Mental Retardation Centers in 16 states and the District of Columbia as well as through other projects which provide for the training of nurse midwives, pediatric nurses, and physician's assistants.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total obligation amount and applying that same percentage to the total expenditure amount.

Federal Evaluations/Studies:

No national evaluations have been made of the Maternal and Child Health Training program.

MATERNAL AND INFANT CARE PROJECTS (M&I) (13.234)

Federal Agency:

HEW: Health Services Administration

Authorizing Legislation:

Social Security Act, as amended, Title V, Section 508(a)(1), P.L. 88-156

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$42,674,900	$31,152,677

Program Objectives and Operations:

To help reduce the incidence of mental retardation and other handicapping conditions associated with childbearing and to help reduce infant and maternal mortality.

Federal funds may not exceed 75 percent of the cost of the project. The 25-percent nonfederal participation may be derived from state and local funds.

Eligible Applicants:

State health agencies or, with the consent of such agencies, to health agencies of any political subdivision of the state and to any other public and nonprofit agency, institution, or organization.

Primary Beneficiaries:

Prospective mothers who have or are likely to have conditions associated with childbearing or are in circumstances which increase the hazards to their health or the health of their infants and who will not receive such necessary health care because they are from a low-income family or for other reasons beyond their control.

Available Program Data:

In the Maternal and Child Health Division there was one active grant to a university in FY 72. In addition, funds were also provided to 31 state health departments, 23 local health departments, and one hospital.

Federal Evaluations/Studies:

According to the Health Services Administration, an evaluation of this program was completed in 1971 by the University of Maryland.

ALLERGY AND INFECTIOUS DISEASES--FELLOWSHIPS AND RESEARCH CAREER DEVELOPMENT AWARDS (13.300)

Federal Agency:

HEW: National Institutes of Health, National Institute of Allergy and Infectious Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$3,579,000	$3,871,000
	PSE $3,292,680(a)	PSE $3,562,000(a)

Program Objectives and Operations:

To promote training for research in areas of scientific concern to this Institute, including allergy, immunology, parisitology and other fields.

Postdoctoral and special candidates must arrange for admission to sponsoring institution and for acceptance by a sponsor. Fellowships support allowable stipend and salary requirements of the awardee. Career development awards provide only a stipend. There are no formula or matching requirements.

Eligible Applicants:

For fellowships, the applicant must have a doctorate and be a U.S. citizen or have in his possession a permanent visa. For research career development awards, the institution makes application on behalf of the candidate. He must have three years of relevant experience beyond his doctorate.

Primary Beneficiaries:

Individuals conducting the research.

Available Program Data:

In FY 72 a total of 95 fellowship awards were made. One hundred and nine Research Career Development Awards were also presented.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

A total of 66 postdoctoral fellowship awards went to 50 institutions including 46 schools--20 public, 23 private, and three other--and four other kinds of institutions. Special fellowship awards were made to individuals at 54 institutions. Eight of these institutions were agencies outside of a university or college type category. Of the 22 higher education schools receiving aid, 11 were public, six were private, and five were under either undetermined, joint- or multi-control. Of the total number of individuals receiving fellowships, 34 were involved in professional work and 61 dealt with academic postdoctoral study.

Several kinds of Research Career Awards are also included under this program. Research Career Development Awards went to individuals at 20 colleges and universities, 11 of which were public; nine of which were private for the support of work by outstanding scientists with clear independent research potential.

Modified Research Career Development Awards for fostering the development of young researchers were received at 35 schools (17 publicly and 18 privately controlled) and four other kinds of research organizations.

Five public and ten private schools received Research Career Awards for their established investigators.

Federal Evaluations/Studies:

No evaluation reports of the Fellowship and Research Career Development Award Program are available. However, a general evaluation of the National Institutes of Health training and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ALLERGY AND INFECTIOUS DISEASES--RESEARCH GRANTS (AND CONTRACTS) (13.301)

Federal Agency:

HEW: National Institutes of Health, National Institute of Allergy and Infectious Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d) and 301(h), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$62,946,000 PSE $54,763,020(a)	Grants	$59,747,000 PSE $51,980,000(a)
	$10,228,000(b) PSE $ 3,272,960(c)	Contracts	$ 6,848,000(b) PSE $ 2,191,360(c)

Program Objectives and Operations:

To assist public and other nonprofit institutions and individuals to establish, expand, and improve research activities in the fields of allergy, immunology, infectious diseases, tropical medicine, parasitology, and related fields. The program also seeks to translate new research findings into health and health research benefits.

Grantee institutions may charge grant funds for allowable direct cost expenditures required to carry on approved projects, plus the allocable portion of allowable indirect cost of the institution. The grantee must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee. Contracts are not subject to cost-sharing agreements.

Eligible Applicants:

Universities, hospitals, laboratories, and other public or private nonprofit institutions are eligible for grants or contracts. In addition, pharmaceutical firms and other commercial organizations are eligible for contracts.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Several specific programs were supported by grants furnished under the general Research program: (1) Research Program Project Grants, which support broadly based and long-term programs of research activities; (2) Categorical Clinical Research Centers, which support basic physical resources and an integrated system of resources and services essential to the conduct of a broad program of research; (3) Outpatient Clinical Research Program, which assists in the establishment, improvement and support of a research environment in which clinical studies can be conducted; (4) Project Grants, which support a specific program; and (5) U.S.-Japan Cooperative Medical Science Program, which supports research for the benefit of the people of Asia. In addition, Research and Development Contracts support the translation of new research findings in infectious and immunological diseases into tangible health and health research benefits.

A total of 1,159 research awards were granted in FY 72. A total of seven institutions received Research Program Project Grants. Two of these institutional grantees were nonacademic organizations and seven were colleges and universities including one under public control, four under private control, and two under some other control.

Support from the Categorical Clinical Research Centers program went to four institutions--one public higher education school and three other organizations such as hospitals and laboratories.

Recipients benefiting from the Outpatient Clinical Research Program included three public and two private schools and three other institutions such as hospitals, to form a total of eight beneficiaries.

A total of 233 institutions received Project Grants. Grantee institutions outside of colleges and universities numbered 58. The remaining 175 recipients included 109 public and 55 private schools.

Funds went to a total of 53 institutions for the support of a U.S.-Japan Cooperative Medical Science Program, which involves research on six specific medical problem areas. Of the 41 university and college recipients, 23 were public and 15 were private. The 12 other recipients included such entities as laboratories or hospitals.

Research and Development Contracts (authorized by Section 301(h) of the same legislation) went to 82 institutions, 46 of which were universities and colleges. Public schools numbered 26, private recipients totaled 17, and institutions under other control numbered three. Other types of beneficiaries receiving support totaled 36. Through contracts and interagency agreements, new research findings on infectious and immunologic diseases are expected to be translated into tangible health and health research benefits.

Federal Evaluations/Studies:

Specific evaluations of these grants and contracts are not available. However, the following general studies are relevant to this program as well as to the research grants and contracts programs of the other Institutes. They are described here in detail and are referred to by notation in the pertinent program descriptions for the other Institutes which follow.

In 1972 a study on the training impact of National Institutes of Health (NIH) research grants was completed by the Statistics and Analysis Branch of the Division of Research Grants, NIH. Through statistical analysis and questionnaire surveys, the study measured the training impact of the NIH research grant program and developed a profile of the distribution of that impact according to academic level, personal characteristics, field of study, and other characteristics.

An abstract of the study noted that the educational and personal characteristics of the individuals do affect the time spent (both total and paid hours) in work on an NIH-funded research project.

For both predoctorates and postdoctorates, physical scientists tend to work more than those with degrees in the basic medical and biological sciences, followed by those holding degrees in internal or clinical medicine or in any of the other disciplines.

M.D.'s and others with a professional health doctorate work an average of 35 or more total hours per year for each additional year of age, and academic predoctorates 30 more hours.

Academic predoctorates work an average of 70 paid hours more on the project for each additional dependent, while professional health postdoctorates average 142 paid hours less for each added dependent. For academic postdoctorates, number of dependents has no significant effect.

Those with other sources of income work fewer paid hours than those without a supplementary income.

Two characteristics--sex and marital status--had no significant effect on the number of work hours performed. The amount of financial support individuals received from the project is related to the educational background and personal characteristics. Predoctorates with bachelor's or master's degrees average higher total earnings at higher rates of pay than those candidates without degrees. The total earnings of academic predoctorates vary with their field of study. Predoctorates earn more annually for each additional year of age, while for postdoctorates it doesn't appear to make any difference. Academic postdoctorates and predoctorates earn more with each additional dependent, but there is no difference for professional postdoctorates. The only characteristic which did not affect either total earnings or hourly rates was sex.

A large number of academic doctoral candidates and almost all postdoctorates work in an unpaid as well as paid capacity on the research project. Educational background and personal characteristics have little or no effect on the amount of unpaid work performed by postdoctorates, but for predoctorates the effect is often significant.

More unpaid project work is performed by those with degrees in the behavioral and social sciences than majors in any other fields, while those with degrees in the physical sciences do less than majors in most other fields. Note that this is in contrast to the situation concerning paid hours. With each additional dependent, the number of unpaid hours worked by academic predoctorates decreases. Approximately 114 more unpaid work hours annually are performed by female academic predoctorates than by their male counterparts. Doctoral candidates with outside sources of income do more unpaid work than those without, except when the additional income is from work performed on another NIH research grant.

Grant characteristics sometimes affect the amount of time spent by personnel on research project work, as measured by the number of total and paid hours worked. Generally, those predoctorates and postdoctorates with research project grants were able to work fewer paid hours than those with grants from special centers, clinical centers, program projects, and similar programs. Predoctorates on research projects at institutions of higher education worked fewer paid and total hours than those at research institutions. Ownership of the institution also affects paid project employment. If the institution is state-owned, predoctorates work an average of 50 paid hours more than do those private, nonprofit institutions. The difference increases to over 150 paid hours at the postdoctoral level.

A number of other characteristics of traditional research project grants affect the amount of support received by academic predoctorates: (1) Predoctorates working on grants which were new applications earned more than those working on completing renewals or projects funded by continuing grants; (2) Predoctorates working on medical school projects averaged about $600 more annually than those on graduate school projects; (3) Although individuals at state institutions worked more paid hours, predoctorates of private nonprofit institutions averaged $400 more annually in salary; and (4) Predoctorates whose field of degree was related to the primary scientific discipline of the grant earned less than those whose major fields differed from that of the grant--an average of $1,138 less in total earnings.

This study made no attempts to evaluate its findings, and no recommendations were made.

Another related study concerning the manpower impact of NIH research grants was completed in 1971 by the Statistics and Analysis Branch of the Division of Research Grants. The investigators utilized survey questionnaires as their methodology. The main purpose for conducting the survey was to obtain information that would be useful for evaluating the effect of the NIH research grants program on the research training of biomedical and allied manpower. An abstract of the study revealed the following major findings:

1. An estimated 91,800 positions (84,000 individuals) received some wage or salary support from NIH research grants, with an average of eight positions (7.4 individuals) being paid by each grant;

2. Personnel expenditures excluding Social Security and fringe benefits amounted to $304 million--$3,310 per position or $3,589 per individual;

3. Nonprofessional staff composed over 40 percent of positions receiving some support.

4. A total of 39,500 nonprofessional positions, 26,550 student and postdoctoral positions, 13,000 other professional staff, and 12,750 faculty positions received some support; and

5. Almost half of the positions receiving grant support were in schools of medicine and 14 percent in graduate schools.

The study also found that research project grants:

1. Had a total of 33,400 students and postdoctorals working on them, with over 40 percent supported solely by sources other than research grants, while 37 percent were supported only by research grants;

2. Had 6,150 students and postdoctorals working on the grants whose sole source of support was an NIH training program;

3. Provided work experience for 13,600 doctoral degree candidate positions, 10,000 postdoctorals, 5,700 baccalaureate candidates, and 4,000 other graduate student positions;

4. Spent an average of $1,940 for each of the 18,000 student or postdoctoral positions receiving grant support;

5. Offered some payment for their work on the grant for 6,600 doctoral degree candidate positions, 3,700 postdoctorals, 4,600 baccalaureate candidates, and 3,000 other graduate student positions;

6. Paid less than $500 to 27 percent of the 18,000 student and postdoctoral positions receiving salary or wages from research project grants; and

7. Generally employed students and postdoctorals for only part of the year--30 percent for less than 12 weeks and 60 percent for less than 26 weeks, and these weeks were not always full-time.

Two-thirds of the 15,000 graduate students and postdoctorals in training status for work on NIH research projects listed the project as their sole means of support, while one-third also had another source of support. They were paid an estimated $41 million. On the whole, earnings were not high, with the major factor affecting the salaries being educational level.

Institutions of higher education employed over 90 percent of the graduate students and postdoctorals. Only professional postdoctorals are found in any significant proportion (one-fourth) in other kinds of institutions.

The study made no recommendations since its purpose was to establish a statistical data base.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ALLERGY AND INFECTIOUS DISEASES--TRAINING GRANTS (13.302)

Federal Agency:

HEW: National Institutes of Health, National Institute of Allergy and Infectious Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$8,922,000 PSE $8,119,020[a]	$8,608,000 PSE $7,833,000[a]

Program Objectives and Operations:

To assist public and other nonprofit institutions in establishing, expanding or improving training opportunities for individuals interested in careers in research training, administration and services in areas of scientific concern to the Institute.

Training projects support allowable direct cost expenditures incident to their performance, plus the allocable portion of allowable indirect costs of the institutions. There are no formula or matching requirements.

Eligible Applicants:

Universities, hospitals, laboratories, and other public or private nonprofit institutions. Trainees must have bachelors degrees or their equivalent.

Primary Beneficiaries:

Promising young scientists in allergy and infectious diseases research.

Available Program Data:

In FY 72, 154 awards were made, providing training support for 1,181 full- and part-time trainees at a total of 88 institutions. The institutional recipients included 77 colleges and universities--48 of which were public; 29 of which were private--and 11 other kinds of agencies and organizations.

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

No evaluation reports of the National Institute of Allergy and Infectious Diseases (NIAID) Training Grant program are available. However, the following general studies are relevant to this program as well as to the training grant programs of the other Institutes. They are described here in detail and are referred to by notation in the pertinent program descriptions for the other Institutes which follow.

In 1972 a broad national study evaluating the National Institutes of Health (NIH) training grant and fellowship programs was concluded. Objectives of the study were to: (1) describe the current utilization of NIH and National Institute of Mental Health (NIMH) graduate training support of institutions, departments and individuals; and (2) assess the impact of possible or actual changes in funding mechanisms upon the institutions, their faculties, programs and students. The discovery of errors in data handling and problems in data analysis have delayed publication of the results of the study, and has resulted further in the appointment of a new contractor to analyze the data. The analysis is now in process and a final report is expected early in 1974.

A general paper concerning the NIH training programs and biomedical research manpower needs, 1972-1980, was completed in 1970 by the Office of Resource Analysis, National Institutes of Health. This paper also has relevance to this program as well as other similar programs within NIH. Through literature review and model simulation the study addressed the following:

1. Amount of federal assistance for the training of graduate students and postdoctoral trainees in the biomedical sciences, as well as for the institutions in which they are trained: The concern here is to produce adequate numbers of trained individuals, but not to stimulate overproduction.

2. Appropriateness of the present methods of providing federal support, and consideration of specific alternatives such as using research grants for the training support mechanism, use of loans and loan guarantees for trainee support, and use of institutional grants: Basically, the study is an attempt to forecast, in the aggregate, the needs for research-trained health manpower through 1980.

The study concluded that the large needs that emerge for research-oriented physicians in biomedical research and in faculty positions reflect what appears to be a relatively rapid turnover in this class of manpower. Characteristics such as high dropout rates, large numbers of terminal masters degrees, and frequent aspirations for careers outside of the biomedical sciences or medical teaching, result in unexpectedly large requirements in the size of the training pipeline. Thus, future needs indicate an enlargement in the number of trainees produced. Neither this study nor other sources investigated gave evidence of significant Ph.D. overproduction in health-related fields.

Major recommendations of the study were:

1. The respective roles of the federal government and the nonfederal sectors in financing the training of biomedical scientists should be developed by NIH in a policy paper;

2. Because present training programs need to be continued in most instances and expanded in some, HEW should continue its current level of support; and

3. NIH should continue to view training grants as the most effective mechanism of support. Its Institutes and research divisions should attempt to work more closely with grantee institutions, improving the efficiency of the training process and according high priority to the problem of national needs in recognizable shortage categories, emerging fields, and promising new disciplines.

Finally a relevant NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ARTHRITIS AND METABOLIC DISEASES--FELLOWSHIPS (13.307)

Federal Agency:

HEW: National Institutes of Health, National Institute of Arthritis, Metabolism, and Digestive Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c) and 308(b) 1-2, P.L. 78-410, as amended; 42 U.S.C. 241 and 242F

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$5,740,000 PSE $4,993,800[a]	$5,716,000 PSE $5,088,000[a]

Program Objectives and Operations:

To support individuals seeking postdoctoral research experience in areas making up the institute mission. These include arthritis, diabetes, endocrinology, and metabolic diseases of blood, of the musculoskeletal system, and of the kidneys.

Awards are not made for the purpose of clinical training. They cover individual stipends, tuition costs, and supply allowances to institutions. The latter serve to defray only a small part of the expense incurred by an institution. Fringe benefits are not included.

Eligible Applicants:

Individuals with doctoral degrees--M.D., D.O., D.D.S., D.V.M.--or other applied science degrees.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, 215 postdoctoral and special fellowships were awarded to students under this program. According to the National Institutes of Health (NIH)

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Basic Data Relating to the National Institutes of Health, 115 postdoctoral fellowships were awarded, as well as 100 special fellowships.

In FY 72, the postdoctoral fellowship grants were funded through 75 institutions, of which 65 were higher education institutions and ten were other organizations or agencies. Thirty-five public higher education institutions, 22 private higher education institutions, and eight other higher education institutions, under multi-, joint, or undetermined control received project grants to support postdoctoral fellowships.

In the area of Special Fellowships, a total of 63 institutions and organizations were awarded fellowship funds. A total of 53 higher education institutions received awards. Twenty public and 25 private higher education institutions under some control other than public or private received funds under this program.

Several other specific programs were supported under the General Fellowship program: (1) Research Career Development Awards, which enhance the career development of outstanding scientists who require additional training; (2) Modified Research Career Development Awards, which seek to foster the development of young scientists; (3) Research Career Awards, which enable institutions to finance positions favorable to the intellectual growth and research productivity of established investigators; (4) Academic Career Awards, which seek to foster academic career development of young teacher-investigators; and (5) Clinical Investigator Career Awards, which provide the opportunity for promising young medical scientists to develop fully into independent investigators.

Research Career Development Awards were distributed to 17 institutions, 13 of which were in the area of higher education, six public and seven private.

Fifty-three institutions and organizations received Modified Research Career Development Awards. Forty-three of these institutions were of higher education; 20 were publicly controlled, and 23 were privately controlled.

Eight institutions and organizations received funds under the Clinical Investigator Career Award. Six were higher education institutions, three public and three private.

Twenty institutions and organizations received funds supported by the Research Career Awards; of these, 18 were higher education institutions, eight public and ten private.

Academic Career Awards were distributed to five higher education institutions and one other organization or agency. Three higher education institutions were public, and two were private.

Federal Evaluations/Studies:

No evaluations of the National Institute of Arthritis, Metabolism and Digestive Diseases Fellowships program are available. However, a general evaluation of NIH training grant and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56.

ARTHRITIS AND METABOLIC DISEASES--RESEARCH GRANTS (AND CONTRACTS) (13.309)

Federal Agency:

HEW: National Institutes of Health, National Institute of Arthritis, Metabolism, and Digestive Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended, and Title III, Sec. 301(h), P.L. 78-410, as amended; 42 U.S.C. 241 and 241(h)

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$101,894,000	Grants	$95,787,000
	PSE $ 83,553,080(a)		PSE $78,545,000(a)
	$ 6,419,000(b)	Contracts	$ 3,520,000(b)
	PSE $ 3,783,520(c)		PSE $ 2,075,000(c)

Program Objectives and Operations:

To support basic laboratory research and clinical investigations extramurally in areas related to the Institute mission.

Eligible Applicants:

Individuals and public and nonprofit institutions who propose to conduct specific research activities in the health sciences and related fields germane to this Institute's mission. Profitmaking organizations are eligible for contracts only.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the toal award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget's Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutons.

Available Program Data:

Various research grant programs supported by the Institute include: (1) Research Program Project Grants, which support broadly based, long-term research activities; (2) Categorical Clinical Research Centers, which provide for support of basic physical resources and services essential to the conduct of a broad program of research; (3) Project Grants, which support specific projects; (4) U.S.-Japan Cooperative Medical Science Program, which supports research on malnutrition for the benefit of people in Asia and the U.S.

In the area of Research Program Project Grants in FY 72, 25 higher education institutions received grants, as did five other organizations and agencies. Eleven of the higher education institutions were public and 14 were private.

A total of ten institutions and organizations received funds for the categorical Clinical Research Centers. These include five higher education institutions (three public and two private) and five other organizations and agencies.

Two hundred and four higher education institutions received grants for the Project Grants program. In addition, 104 other agencies and organizations received funds. Of the higher education institutions, 117 were public, 72 were private, and 15 were under joint or other control.

Funds for the U.S.-Japan Cooperative Medical Science Program were distributed to ten higher education institutions and two other agencies or organizations. Of the higher education institutions, three were public, three private, and four otherwise controlled. In FY 72, a total of 184 research grants were awarded to the various institutions.

The objectives of the Research Contracts supported by the Institute are to conduct research and development directed toward specifically identified goals, primarily in areas of artificial kidney development, chronic uremia and other kidney diseases, digestive diseases, nutrition, and to privide for functions in support thereof. In FY 72, 28 higher education institutions, and 30 other agencies and organizations received funds. Twelve public and 13 private higher education institutions received contract funds. Three higher education institutions under multi-, joint, or undetermined control also received funds. Eighty research and education contracts were awarded to the institutions.

Federal Evaluations/Studies:

No specific evaluations have been made directly relating to the National Institute of Arthritis, Metabolism, and Digestive Diseases Research Grant program. However, two other general studies are relevant here: (1) a study of the training impact of the National Institutes of Health (NIH) research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ARTHRITIS AND METABOLIC DISEASES--TRAINING GRANTS (13.308)

Federal Agency:

HEW: National Institutes of Health, National Institute of Arthritis, Metabolism and Digestive Diseases

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$15,072,000	$15,809,000
	PSE $12,660,480(a)	PSE $13,279,560(a)

Program Objectives and Operations:

To assist public and other nonprofit institutions in establishing, expanding, or improving training opportunities for individuals interested in careers in research and teaching in the specific areas making up the institute's mission.

The grants may include both stipend support for trainees and defrayal of certain institutional training costs. However, the nonstipendiary component provides only a small defrayal of research costs, which must be met from other sources such as research grants. Indirect cost allowances are limited to 8 percent of direct costs.

Eligible Applicants:

Teaching institutions, including university-related medical centers that have demonstrable capability in both attracting qualified training candidates and providing development experience needed in preparation for teaching and research careers.

Primary Beneficiaries:

Institutions and trainees.

Available Program Data:

In FY 72, out of a total of 99 institutions and organizations, 76 higher education institutions received grants under this program to assist and extend training of individuals preparing for research and academic careers. This included 40 public and 36 private higher education institutions.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

In FY 72, 256 research training grants were distributed to the various institutions and organizations. In addition, 851 postdoctoral and 244 predoctoral individuals received training through these grants.

Federal Evaluations/Studies:

No evaluation of these Training Grants programs are available. However, a general evaluation of the National Institute of Health (NIH) training grant and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56.

CANCER--CLINICAL TRAINING (13.311)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$7,257,000 PSE \$6,354,165[a]	\$4,826,000 PSE \$4,227,576[a]

Program Objectives and Operations:

To increase the quality and broaden the scope of cancer instruction at the undergraduate, graduate, and postgraduate levels and to seek new and better ways of providing clinical cancer teaching.

The grants may be used for salaries of professional and nonprofessional personnel, short term training, stipends, permanent equipment, consumable supplies, travel, and other expenditures which do not fall into the specific categories and indirect costs. There are no formula or matching requirements.

Eligible Applicants:

Schools of medicine and their principal affiliated teaching hospitals, schools of dentistry and public health, and specialized cancer institutions, capable of giving intensive training in cancer management.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a total of 612 individuals received Clinical Training Grants. Of the 69 who did not hold a degree, 47 sought a professional doctorate degree, six sought a bachelor's degree and 16 were seeking no particular

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(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

degree with their monies. Nearly all recipients initially holding baccalaureate degrees (327 of 335) sought professional doctor's degrees with their grants. One recipient sought an academic doctorate; another a masters degree; and six were not involved in attaining any degree. Of the 20 trainees with masters degrees, 15 sought a professional doctorate, three were aiming for an academic doctorate; and two sought no particular degree. A total of ten recipients had academic doctorates. Five of them were seeking a professional doctor's degree, and five were not seeking degrees. The number of professional doctors receiving grants totaled 178; one sought an academic doctorate, three sought masters degrees; and 174 sought no degree. All in all, 394 recipients were pursuing professional doctorates, five were working toward academic doctorates, four toward masters; six wanted baccalaureates and 203 were not seeking degrees.

These recipients attended a total of 77 higher education institutions, 41 of which were public and 36 were private. A total of nine other organizations such as hospitals and public agencies also received funds.

Federal Evaluations/Studies:

No evaluations of the Cancer Clinical Training program are available.

Information Source:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

CANCER--CONSTRUCTION (13.392)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Section 410(2), P.L. 92-218; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$51,003,000 PSE \$27,000,000(a)	\$635,000 PSE \$311,000(a)

Program Objectives and Operations:

To expand existing cancer research facilities which are a critical component of the expanded cancer research program, and to achieve a geographic distribution of cancer research facilities and centers.

New physical resources for cancer research include basic research laboratories support facilities, and limited clinical and animal facilities that are an integral part of an overall research effort. Proposed facilities must be part of an existing cancer research effort. Facilities constructed may not be used to replace existing cancer research facilities, and shall be used for research pertinent to cancer problems for at least twenty years. Up to 75 percent of the cost may be made from federal funds. Cost sharing is required and is individually negotiated with each grantee.

Eligible Applicants:

Except where otherwise prohibited by law, any organization competent to carry out cancer research, including universities, colleges, hospitals, public agencies or nonprofit research institutions.

Primary Beneficiaries:

Public and private organizations and the public needing treatment for cancer.

Available Program Data:

In FY 72, 17 grant awards were made under this new program. Nine awards went to schools of higher education. Five of these schools were public and four were private. Eight other organizations including laboratories, patient centers, or possible social service organizations, also received awards. Three contract construction awards were made in FY 72. Two were made to universities and one for construction at the Frederick, Md. Cancer Research Center.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

No evaluations of the National Cancer Institute Construction program are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

CANCER--GRADUATE TRAINING (13.373)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$9,217,000 PSE $7,395,517[a]	$6,043,000 PSE $4,846,000[a]

Program Objectives and Operations:

To help provide an adequate aupply of competent research manpower, and to alleviate critical shortage of professional personnel in selected areas affecting the combination of research training and service in the area of cancer.

Graduate training research grants provide support for trainees in the various fields related to cancer research. There are no formula or matching requirements.

Eligible Applicants:

Universities, colleges, hospitals, public agencies and nonprofit research institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Grant monies were received by a total of 62 institutions in FY 72. A total of 43 of these recipients were institutions of higher education. Public higher education institutions receiving funds numbered 24, while 19 private institutions received these project grants.

Funds also went to 19 other organizations such as hospitals or public agencies, etc.

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Postdoctoral trainees assisted by this program totaled 359 and predoctoral trainees totaled 275.

Federal Evaluations/Studies:

A Follow-up Survey of the National Cancer Institute (NCI) Graduate Research Trainees was published in August, 1973. A questionnaire was mailed to all former trainees who had participated in the NCI Graduate Research Training Program. Almost half of all former trainees report that they are presently employed by a university. A total of 40.8 percent of the trainees surveyed report they spend at least 50 percent of their time in research. Over half of the trainees (56.4 percent) report they spend at least 10 percent of their professional time at teaching or training. Most former trainees reported that the NCI-supported training contributed significantly to the achievement of their career goals.

In addition, a general evaluation of the National Institutes of Health (NIH) training grant and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70, 71.

CANCER--RESEARCH AND DEVELOPMENT CONTRACTS[a]

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, as amended by P.L. 92-218, Section 407 to 410, inclusive; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$122,033,000 PSE \$ 40,392,923[b]	\$74,081,000 PSE \$24,520,811[b]

Program Objectives and Operations:

To carry out the National Cancer Program in planning and developing an expanded, intensified, and coordinated cancer research program encompassing the programs of the National Cancer Institute (NCI), related programs of the other research institutes, and other federal and nonfederal programs. Contracts are awarded competitively, after proposals are received and reviewed. The exception would be those circumstances in which noncompetitive procurements may proceed, as these circumstances are set forth in applicable procurement regulations. Requests for proposals on each specific project are synopsized in the U.S. Department of Commerce's Commerce Business Daily. Qualifications Statements are solicited therein, also. Contracts for the services of educational institutions are publicized in supplements to the National Institutes of Health (NIH) Guide for Grants and Contracts, in lieu of the Commerce Business Daily.

Eligible Applicants:

All institutions, firms or individuals having necessary qualifications and interest.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This program was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(b) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

In FY 72, a total of 252 contractors were awarded 582 contracts totaling $122,033,000. Of the 582 contracts awarded, 196 had an award value of more than $750,000. Approximately one-third of these contract funds went to postsecondary institutions.

Federal Evaluations/Studies:

No evaluation of the National Cancer Institute (NCI) Research and Development Contracts is available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

CANCER--RESEARCH CAREER PROGRAMS (13.315)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(c) and 308, P.L. 78-410, as amended; 42 U.S.C. 241 and 242F

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$2,026,000 PSE \$1,823,000[a]	\$1,904,769 PSE \$1,714,500[a]

Program Objectives and Operations:

To foster the development of young scientists with outstanding research potential for careers of independent research in the fields related to cancer research.

Funds are used only to provide full salaries for young scientists to develop into independent investigators. No funds are provided for indirect costs, fringe benefits, or any other costs such as research support, travel, and tuition or training expenses. There are no formula or matching requirements.

Eligible Applicants:

Candidates must be nominated by a nonfederal public or private nonprofit institution engaged in health-related research and located in the U.S. or its possessions or territories. Candidates must have at least three years of relevant postdoctoral experience, and be less than forty years of age. Candidates for initial award must be U.S. citizens or nationals or have permanent residency status.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Research Career programs are actually part of a comprehensive program which includes three kinds of research career awards. In FY 72, a total of 85 Research Career program awards of all kinds were made to individuals at 60 institutions, 53 of which were schools of higher education. Of these

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

20 were private and 33 were public.

A total of 23 Research Career Development awards were made to 16 schools (11 public; five private) and five other organizations such as research institutes or foundations, etc. for the development of independent research potential in outstanding scientists. Modified Research Career Development awards went to 51 individuals at 36 schools (22 public; 14 private) and two other organizations for young scientists with outstanding potential for careers of independent research in health science areas. The eleven recipients of Research Career awards, highly competent investigators in need of support for intellectual growth and research productivity, were located at 10 schools (five public; five private) and one other organization.

Federal Evaluations/Studies:

No evaluations on the Cancer Research Career programs are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

CANCER--RESEARCH CENTERS (13.312)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$50,203,000 PSE $25,011,000(a)	$44,162,000 PSE $21,992,000(a)

Program Objectives and Operations:

To provide a multidisciplinary approach in basic and clinical cancer research toward the cause, prevention, and methods of diagnosis in the treatment of cancer.

Grants may be made for research centers, the critical characteristics of which will be the relationship of the center to an allied medical-education or research institution, which will enable the center to attack the problems through multidisciplinary approach to cancer research. A one to two year exploratory grant may also be made to determine the feasibility of a research center. The grantee must participate in the cost of each research project. Cost-sharing agreements are negotiated with the grantee on an individual basis.

Eligible Applicants:

A university, college, hospital, public agency, or nonprofit research institution.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, there were 43 awards made in support of 32 cancer research centers. A total of 19 higher education institutions received monies under this program. Seven of these institutions were publicly controlled; 12 were privately controlled. A total of 13 other organizations including hospitals, research institutes and associations also received funds.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

No evaluations of Cancer Research Centers are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

CANCER--RESEARCH FELLOWSHIPS (13.313)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$1,921,000 PSE \$1,517,590[a]	\$1,808,231 PSE \$1,426,512[a]

Program Objectives and Operations:

To promote postdoctoral training for research in the health sciences of importance to the cancer problem.

Fellows must be in training in cancer research. Funds may not be used for employment or staffing; travel; for the research and writing of books; to acquire M.D., D.D.S., D.O., etc.; for part-time or summer work; or for any training activity which does not have a large research component. There are no formula or matching requirements.

Eligible Applicants:

U.S. citizens or those with permanent residency status. The doctoral degree or the equivalent in the biomedical sciences is required.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 197 fellowships (134 postdoctoral and 63 special) were awarded to 34 holders of the M.D. or equivalent professional doctorate (including those holding both professional and academic) degrees and 163 holders of the Ph.D. or equivalent academic doctorate.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total awards amount and applying that same percentage to the total obligations and expenditure amounts.

A total of 60 institutions of higher education--37 public, 21 private, and two under multi- or joint control--received funds for postdoctoral fellowships. The remaining postdoctoral fellowships went to 16 other organizations such as public agencies and hospitals.

Special fellowships went to individuals in 45 schools, 23 of which were public, 17 of which were private, and five of which were controlled jointly or were undetermined.

The number of other agencies such as government units, social service organizations, etc., which received awards totaled nine.

Federal Evaluations/Studies:

A Follow-up Survey of the National Cancer Institute (NCI) Postdoctoral Fellows was published in August, 1973. A questionnaire was mailed to all former fellows who had participated in the NCI Research Fellowships program. More than 60 percent of those responding are at present employed by universities. The next largest employer is the federal government with 8 percent. Only 6 percent describe themselves as private physicians. Since the end of their NCI-supported fellowships, 96 percent of the fellows have held a position in teaching and/or research, 42 percent spend 50 percent or more of their time doing research and over 70 percent of the fellows spend at least 10 percent of their time teaching or training others in educational institutions. Of the former fellows, 80 percent feel that NCI-supported training has significantly contributed towards the achievement of their career goals.

In addition, a general evaluation of all National Institutes of Health training grant and fellowship programs in described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70, 71.

CANCER--RESEARCH GRANTS (13.314)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241 and PHS Act, as amended by P.L. 92-218, Sec. 407 to 410, inclusive; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$68,309,000	$60,130,000
	PSE $34,018,000	PSE $29,944,000

Program Objectives and Operations:

To conduct, assist, and foster research on the causes, diagnosis, and preventive treatment of cancer.

The grants may be used for personnel, consultant costs, equipment, supplies, travel, patient costs, animals, alterations, and renovations, miscellaneous items, and indirect costs. Scientific evaluating grants are awarded to chairmen of preliminary review groups to fund the activities of the members. These review groups are organized and directed by the National Cancer Institute. The grantee must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

A university, college, hospital, public agency, or nonprofit research institution which submits an application and receives a grant for support of research by a named principal investigator. In exceptional cases, a grantee may be an individual in the U.S.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a total of 1,457 research grants (excluding the National Targeted Projects and Categorical Clinical Research Programs) were awarded for a wide variety of different research activities.

A total of 1,138 research project grants for $54,693,492 were awarded to 271 institutions in support of specialized research projects to be performed by named investigators. One hundred and eighty-nine were schools of higher education for $41,215,884, while 82 other kinds of research organizations received $13,477,608. One hundred and nineteen of the higher education institutions were publicly controlled; 68 were privately controlled; and two were under joint or other control.

A total of 211 Cooperative Clinical Research, Chemotherapy and Psychopharmacology Research grants in the amount of $11,697,203 for support of clinical evaluations of various methods of therapy in specific disease areas went to 110 institutions, 67 of which were higher education, and 43 of which were other, including hospitals, research institutions, etc. Of the 67 higher education grantees, 40 were public and 27 were private colleges or universities.

Funds amounting to $272,921 for 10 awards went toward support of international or national meetings, conferences, or workshops at three institutions of higher education and six other organizations, to comprise a total of nine grantees.

The United States-Japan Cooperative Medical Science Program for supporting research or medical problem areas for Asian peoples awarded one grant for $180,747 to a private institution in FY 72 for cancer research.

A total of 70 grantee institutions received 97 awards totaling $31,616,605 for Research Program Project grants supporting broadly based, usually long-term research activities. Forty-nine of the 70 were institutions of higher education (28 public; 21 private). There were also 21 other types of research organizations which received funds.

Federal Evaluations/Studies:

In 1969, the National Cancer Institute (NCI) completed a study entitled, "Recommendations of the Cancer Clinical Investigation Review Committee (CCIRC) and the National Advisory Cancer Council (NACC) Re: the Cooperative Clinical Cancer Research Program." The NCI investigators were interested in exploring the application of the cooperative, multi-institute research technique to the clinical investigation of cancer-related problems. In addition, they introduced guidelines and procedures for evaluating grant proposals to the CCIRC Program. The study methodology was goals achievement analysis.

As stated in the abstract of this study, the objective of the Cooperative Clinical Cancer Research Program is to improve the treatment of patients with cancer through research, training, and service. The clinical research supported must be related to cancer, concern a significant number of patients such that a group or multi-institute effort is required, attempt to answer a significant question, and utilize a feasible methodology.

The Committee's major recommendations concerned modifications to the CCIRC by the NACC. They were:

1. The Review Committee should continue to rely on the advice of expert consultants, and all cooperative groups should be subjected to similar peer review.

2. Retention of the present system of drug procurement through the Chemotherapy Program, with appropriate cost reimbursement, is desirable.

3. Specific liaison should be established between the Clinical Investigations Branch and agencies and organizations with an interest in clinical cancer investigation, as well as the Office of Comprehensive Health Planning, the American College of Surgeons, and other professional groups. In relation to this it was suggested that the Clinical Investigations Branch be expanded by at least one full-time staff member to provide appropriate liaison with related organizations.

4. Third-party and other funds should be used whenever possible, and investigators should be urged rather than simply encouraged to seek these sources.

Two other general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants described on p. 180 and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

CANCER--TASK FORCES (ORGAN SITE RESEARCH, NATIONAL TARGETED PROJECTS) (13.391)

Federal Agency:

HEW: National Institutes of Health, National Cancer Institute

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$638,000	$551,000
	PSE $ 63,800(a)	PSE $ 55,100(a)

Program Objectives and Operations:

To establish national task forces for the purpose of improving prevention, diagnosis, and treatment of cancer in specific organs. Areas of concentration included cancer of the large bowel, the bladder, and the prostate.

A program director for each of the task forces with the assistance of a working cadre will be responsible for planning and technical administration of the individual programs. Grantees must participate in the cost of each research project. Cost-sharing is negotiated with the grantee on an individual grant or institutional basis.

Eligible Applicants:

Universities, colleges, hospitals, public agencies, and nonprofit research institutions are eligible. Applications will generally be solicited by program directors to adhere to an approved comprehensive plan of research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

A national plan is under development to establish targeted programs for both large bowel and bladder-prostate task forces. It is planned that the projects will be fully operational by FY 73.

In FY 72, four institutions received four awards from the program. One of these recipients was a private institution of higher education and three were other organizations such as hospitals or public agencies, etc.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

No evaluation on the National Cancer Institute (NCI) Task Forces is available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

CHILD HEALTH AND HUMAN DEVELOPMENT--FELLOWSHIPS (13.316)

Federal Agency:

HEW: National Institutes of Health, National Institute of Child Health and Human Development

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$3,652,000 PSE \$3,287,000(a)	\$3,868,000 PSE \$3,481,000(a)

Program Objectives and Operations:

To support training of qualified scholars for research and academic careers in the basic and clinical sciences related to population, child health, human development, and the aging process.

Fellowships are awarded for full-time research training, though fellows may utilize some of their time in academic and clinical duties if such work is closely related to their research training. Awards include basic stipends, dependency allowances, and supporting supply allowances. Postdoctoral and special fellowships are available, as well as research career development awards. There are no formula or matching requirements.

Eligible Applicants:

Applicants must be U.S. citizens or have permanent residency status. A doctoral degree or the equivalent degree in the biomedical or behavioral sciences is required. The applicant must arrange for submission on his behalf of reference reports and commitments of sponsors and facilities. There are no formula or matching requirements.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

Aside from the self-explanatory Postdoctoral and Predoctoral Fellowship programs, several other programs are administered under the general Fellowship program: (1) Special Fellowships, which provide support for individuals in mid-career to extend their potential for research in health and health-related fields; (2) Research Career Development Awards, which support outstanding scientists who require additional training; (3) Modified Research Career Development Awards, which foster the development of young scientists with outstanding research potential.

In FY 72, 89 fellowships were awarded in a variety of disciplines covering the medical, biomedical, and behavioral fields. According to *Basic Data Relating to the National Institutes of Health*, 48 were postdoctoral and 41 were special fellowships. Postdoctoral fellowships were received at a total of 76 institutions, a majority of which (60) were colleges and universities. Of this last total, 37 schools were public, 21 were private and two were under other kinds of control.

Special fellowships went to individuals at 36 institutions. The 28 universities and colleges receiving monies included 15 public and 11 private schools and two schools of joint or undetermined control.

A total of 110 Research Career Development Awards went to scientists at 22 institutions, 20 of which were colleges and universities, including eight public and 12 private schools.

A total of 54 institutions benefited from Modified Research Career Development Awards. A total of 49 higher education institutions, including 28 public and 21 private schools, comprised the majority of grantees.

Seven scientists in seven institutions, six of which were colleges or universities (two public and four private) received support under the long-term Research Career Awards program. According to the National Institutes of Health (NIH), this program no longer offers new awards.

Federal Evaluations/Studies:

No evaluations on the Fellowship program of National Institute of Child Health and Human Development have been completed. However, a general evaluation of NIH training grant and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

CHILD HEALTH AND HUMAN DEVELOPMENT--RESEARCH GRANTS (AND CONTRACTS) (13.317)

Federal Agency:

HEW: National Institutes of Health, National Institute of Child Health and Human Development

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended, Title IV, Part E, P.L. 78-410, as amended; 42 U.S.C. 241, and 252(c)(11)

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$64,251,000 PSE $48,188,250(a)	Grants	$53,188,000 PSE $39,891,000(a)
	$20,300,000(b) PSE $14,413,000(c)	Contracts	$ 9,214,000(b) PSE $ 6,542,000(c)

Program Objectives and Operations:

To support research in health, medicine, and allied fields with the major objectives (1) of continuing existing programs of research, (2) of expanding medical, biological, and behavioral science research activities in universities, hospitals, laboratories, and other public or private institutions, and (3) of stimulating new investigations in related fields needing exploration.

Grantees must participate in the cost of each research project. Cost-sharing agreements are negotiated with the grantees.

Eligible Applicants:

Universities, colleges, medical, dental and nursing schools, schools of public health, laboratories, hospitals, state and local health departments, other public or private nonprofit institutions, and individuals. Contracts may be awarded to profit-making institutions as well as nonprofit individuals and organizations. Each grant and contract application is reviewed on the basis of scientific merit, the qualifications of the program director, and the adequacy of facilities.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Research Grant Program includes: (1) Regular Research Grants, which vary from broadly based and long-term research projects to specific research endeavors; (2) the multidisciplinary Mental Retardation Research Centers; (3) Conferences, which provide for national and international meetings and workshops; (4) the administration (but not funding) of specific projects in the U.S.-Japan Cooperative Medical Science Program, which supports research for the benefit of the Asian people; (5) Research and Development Contracts, which support research and development in the sciences relating to maternal health, child health, human growth and development, maturation and the aging process, reproductive and prenatal biology, and others.

In FY 72, 919 research grants were awarded in a variety of disciplines. Research Program Project Grants (broadly based, long-term) including Mental Retardation Research Centers went to 58 institutions, 41 of which were colleges and universities. Out of the total number of schools, 22 were public and 19 were private.

Project Grants (specific research endeavors) were received at 181 higher education institutions, including 111 public and 66 private colleges and universities and four schools under other controls out of a total of 255 institutional grantees.

Conferences were supported at two public and one private school in addition to seven other institutions.

Recipients of assistance for U.S.-Japan Cooperative Medical Science Programs included one public institution, one private school, one school of joint or multi-control, and two nonacademic institutions, for a total of five grantees.

In addition, Research and Development Contracts for the support of research and development in the biomedical sciences, including studies in maternal health, child health, human growth, maturation and the aging process were made in FY 72. According to Basic Data Relating to the National Institutes of Health, 221 contracts were awarded to the various institutions.

Federal Evaluations/Studies:

Evaluations of the National Institute of Child Health and Human Development Research Grants program are not available. However, two other general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

CHILD HEALTH AND HUMAN DEVELOPMENT--TRAINING GRANTS (13.318)

Federal Agency:

HEW: National Institutes of Health, National Institute of Child Health and Human Development

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended, 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$10,142,000 PSE $ 9,432,060(a)	$10,212,000 PSE $ 9,497,000(a)

Program Objectives and Operations:

To increase the national supply of trained scientists, teachers and physicians in basic and clinical sciences related to population, child health, human development, and the aging process. The program also seeks to improve quality of training and to increase and strengthen opportunities for scientists and investigators in biomedcial research careers.

Training grants are available to institutions which provide excellent training programs capable of preparing both laboratory and clinical scientists for research careers in this area. Trainees must meet the eligibility requirements of the grantee institution. There are no formula or matching requirements.

Eligible Applicants:

Qualified nonprofit institutions providing research training in health sciences and related fields.

Primary Beneficiaries:

The trainees.

Available Program Data:

Grant funds may not be used: (1) for the support (stipend, tuition, or travel) of any trainee for whom a statement of appointment has not been submitted to the awarding unit; (2) for the support of any trainee who because of age, physical, or mental condition, or other relevant factor, would not in the judgment of the program director be able to use the training or meet the institution's minimum qualifications for the training involved in the project; (3) for the continuation support of a trainee who has failed to demonstrate satisfactory participation; (4) for support of candidates for degrees of M.D., D.D.S., D.O., D.V.M., or similar degrees, except as otherwise provided; or (5) residency training and as stated in the terms of award. As reported in Basic Data Relating to the National Institutes of Health, 137 training grant programs in a variety of disciplines covering the medical, biomedical, and behavioral fields were funded in FY 72. A total of 337 postdoctoral and 841 predoctoral full- and part-time trainees benefited. These trainees were located at a total of 74 institutions, 63 of which were schools, including 33 public and 30 private universities and colleges.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

Evaluations on this Training Grants program are not available. However, a general evaluation of the National Institutes of Health (NIH) training grants and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

DENTAL RESEARCH--FELLOWSHIPS (13.324)

Federal Agency:

HEW: National Institutes of Health, National Institute of Dental Research

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(c), P.L. 78-410, as amended, 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,367,000 PSE $1,175,620 (a)	$1,510,000 PSE $1,299,000 (a)

Program Objectives and Operations:

To support individual graduate research training, especially in the area of dental clinical investigation. Research career development awards (RCDA) are designed to further young scientists' development as independent investigators.

For postdoctoral and special fellowships, stipends are determined on an individual basis. Additional funds may include tuition, travel, and a supply allowance. Career development awards are non-renewable and are made to institutions on behalf of a qualified individual for a five year period. There are no formula or matching requirements for any of these awards.

Eligible Applicants:

Postdoctoral fellowships: Individuals are eligible who have a doctorate degree and seek research training. Special fellowships: These are available to experienced researchers or to persons requiring specialized research training. RCDA: These candidates must have at least three years of postdoctoral experience and have shown the potential for a career in independent research. All applicants must be U.S. citizens or have permanent residency status.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

Several specific programs are supported by grants furnished under this general fellowship program: (1) Predoctoral Fellowship program, which provides for predoctoral research training support; (2) Postdoctoral Fellowship program, which provides for postdoctoral research training support; (3) Special Fellowship program, which provides support for researchers in mid-career; (4) Research Career Development Awards, which enhance the career development of outstanding scientists; (5) Modified Research Career Development Awards, which foster the development of young scientists; and (6) Research Career Awards, which enable institutions to finance positions favorable to established investigators.

In FY 72, three higher education institutions received Predoctoral Fellowships. These were distributed to two public and one private higher education institutions.

Twenty-four institutions and organizations received funds for the Postdoctoral Fellowship program. Twenty-three were higher education institutions; 15 of which were public, and eight were private.

Special Fellowships were distributed to 19 higher education instutitions and four other agencies and organizations. Of the higher education institutions, 11 were public, five were private, and three were under multi, joint, or an undetermined control.

Research Career Development Awards were awarded to only higher education institutions. A total of three institutions received these awards, of which two were public and one was private.

Modified Research Career Development Awards were presented to a total of 15 institutions and agencies. Twelve of these institutions were of higher education; eight were public, and four were private.

Only three higher education institutions received funds distributed under the Research Career Awards program. Two of the institutions were public, and one was private.

Federal Evaluations/Studies:

A recent study entitled "Post-Training Study of NIDR-Supported Trainees and Fellows" has been completed and is described on p. 227.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

DENTAL RESEARCH--GRANTS (AND CONTRACTS) (13.325)

Federal Agency:

HEW: National Institutes of Health, National Institute of Dental Research

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d) and (h), P.L. 78-410, as amended; 42 U.S.C. 241; Federal Property and Administrative Services Act, as amended, 41 U.S.C. 252, Sec. 302(c)(5) and Sec. 302(c)(11)

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$21,738,000 PSE $18,912,060(a)	Grants	$19,304,000 PSE $16,794,000(a)
	$ 5,267,000(b) PSE $ 2,580,830(c)	Contracts	$ 2,706,000(b) PSE $ 1,326,000(c)

Program Objectives and Operations:

To support both clinical and nonclinical research projects bearing on oral health problems. In order to develop methods for treating and preventing tooth decay, peridontal disease, oral cancer, oral-facial defects, and other oral disorders, knowledge is needed in the fundamental as well as the applied sciences.

Administration of a grant-supported research project is a joint undertaking by the grantee and the principal investigator. When the grantee is an individual not affiliated with an institution, bonding is required as an assurance of financial responsibility. Grantees must participate in the cost of each research project. Cost-sharing agreements are individually negotiated.

Eligible Applicants:

Scientists at universities, hospitals, laboratories, and other public or private nonprofit institutions.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Specific programs administered under the general Research Grant program consist of: (1) Research Program Project Grants, which support broadly based and long-term research activities; (2) Dental Research Institute Program, which supports the establishment and operation of centers of research and training in the sciences related to oral health; (3) Project Grants, which support specified projects; (4) Conferences, which provide for international or national meetings, conferences, and workshops; (5) Special Research Award Program, which supports basic and clinical studies so that newly trained investigators remain active during the development stage of their career; and (6) Research Contracts, which support research and development projects designed to solve problems of oral health.

In FY 72, Research Program Project grants were distributed to 18 institutions of higher education, and four other agencies and organizations. Twelve of the higher education institutions were public, and six were private.

Only higher education institutions received funds under the Dental Research Institute Program. Of the five higher education institutions which received funds, four were public, and one was private.

Project grants were distributed to 85 institutions and organizations. Seventy-seven of these were higher education institutions. They included 47 public, 29 private, and one multi, joint, or undetermined controlled, higher education institutions.

One higher education institution, out of a total of three institutions and organizations, received funds for conferences. These funds were distributed to one private higher education institution.

Grants under the Special Research Award Program were distributed to 20 institutions and organizations, 17 of which were higher education institutions. Fourteen public and three private higher education institutions received these funds.

Research Contracts are awarded competitively to profit-making and nonprofit-making organizations in support of projects designed to attain National Institute of Dental Research (NIDR) goals and objectives in treating and preventing oral diseases. Research contracts were awarded to 34 organizations. Eighteen of the institutions receiving funds were institutions of higher education; the remainder were commercial organizations or research foundations.

A total of 271 research grants and 46 research and education contracts were awarded to the various institutions and organizations.

Federal Evaluations/Studies:

No evaluations of the NIDR Research Grants and Contracts Program are yet available. However, state of the art assessments are being conducted or are planned in all relevant research areas. Workshops on Biomaterials and on Tissue Degradation will be completed by the end of 1973. Reports will be available from the Institute.

Two other general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

DENTAL RESEARCH--TRAINING GRANTS (13.326)

Federal Agency:

HEW: National Institutes of Health, National Institute of Dental Research

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$5,270,000 PSE $4,901,100(a)	$5,272,000 PSE $4,902,000(a)

Program Objectives and Operations:

To increase the number of dental scientists by supporting research training programs developed by grantee institutions.

Administration of a grant-supported training project is a joint undertaking by the grantee and the program director. There are no formula or matching requirements.

Eligible Applicants:

Trainees must be U.S. citizens or have permanent residency status. They must meet the requirements of the individual training program.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The specific program administered under the general Training Grants program is the Graduate Training Program, which assists and extends the training of individuals preparing for research and academic careers.

According to Basic Data Relating to the National Institutes of Health, 137 training grants were distributed to the various institutiions in FY 72. In addition, 580 trainees were involved, including 248 postdoctoral and 332 predoctoral trainees.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

A follow-up survey of National Institute of Dental Research (NIDR) Graduate Trainees and Postdoctoral Fellows was conducted by Westat Inc. as part of the National Institutes of Health (NIH) 1972 evaluation program.

According to the Executive Summary prepared by the NIH Office of Program Studies and Analysis, a survey was taken of recipients of educational support from NIDR. These recipients were divided into two groups: (1) trainees supported by Graduate Training Grants; and (2) recipients of Postdoctoral or Special Fellowship Awards. In the case of trainees, the survey covered those who had received nine months or more of training support from FY 58 through FY 71. Fellows included all recipients of fellowship awards from the inception of the program (1949) through those starting in FY 71. Individuals who had received both training and fellowship support were counted only as fellows.

Some of the more salient features of the results include:

1. More than 80 percent of both the fellows and the trainees have held positions in teaching and/or research since the end of their NIDR-supported training;

2. Dentistry and dental specialties are the present fields of activity of about 47 percent of the trainees and about 54 percent of the fellows;

3. Former NIDR fellows and trainees have sponsored an estimated total of 960 other trainees and fellows;

4. About 70 percent of the trainees and over 82 percent of the fellows feel that their NIDR-supported training helped them significantly in achieving their career goals. More than 54 percent of the trainees and over 62 percent of the fellows stated that they could not have obtained the same training without NIDR support.

The survey noted that in the mid- and late-sixties, it was rumored that there was a "scientist over-supply." It is interesting to note that, if in fact there was a "scientist over-supply," it was not true of NIDR-supported trainees or fellows. Fewer than one percent reported that they were unemployed. Furthermore, if the federal government ended its role of support for graduate education in selected fields of biomedical research as it is related to dentistry, the study suggested that the number of trained investigators in that area would be halved.

Several other general NIH studies are relevant here: (1) a general evaluation of NIH training grant and fellowship programs is described on p. 185. A paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally a study "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70, 72.

ENVIRONMENTAL HEALTH SCIENCES--FELLOWSHIPS (13.327)

Federal Agency:

HEW: National Institutes of Health, National Institutes of Environmental Health Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$274,000 PSE \$265,780[a]	\$260,000 PSE \$252,000[a]

Program Objectives and Operations:

To support fellowships for training for individuals at the postdoctoral level in professions of importance to environmental health research. Research Career Development Awards are made to institutions to provide stable salary support for the development of young scientists with potential for careers of independent research.

Fellowship awards, paid directly to the fellow, consist of stipends, the amounts of which are based on relevant postdoctoral experience, allowances for dependents, tuition and fees. Research Career Development Awards are made to the sponsoring institution. Supplementation of fellowship and career awards from funds not from the National Institutes of Health (NIH) is allowed. There are no formula or matching requirements.

Eligible Applicants:

Applicants must be U.S. citizens, non-citizen nationals, or have permanent residency status. Postdoctoral fellowships are awarded to qualified scholars who have earned a doctoral degree; applicants for a research career development award must have at least three years of relevant postdoctoral experience; and special fellowships are intended to support advanced training of persons whose qualifications and needs make other types of fellowships inapplicable. Applicants must be sponsored by a domestic or foreign private, nonprofit, or government institution with facilities adequate for the program.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Of the 19 awards made in FY 72, seven were postdoctoral, four were special fellowships, and eight were Modified Research Career Development awards.

Postdoctoral fellowships were received by individuals in institutions, two of which included organizations such as public agencies, etc. Of the five schools at which funds were received, four were public and one was private. These awards provided for postdoctoral research training in health and health-related fields.

Special fellowships went to recipients at two public schools and two private schools to make a total of four colleges and universities. These fellowships provide support for individuals in midcareer to extend their potential for research in health and health-related fields.

Recipients of the Modified Research Career Development Awards were located at seven institutions of higher education, two of which were public and five of which were private. These awards foster the development of young scientists with outstanding research potential for careers in independent research in the sciences related to health.

Federal Evaluations/Studies:

No evaluations of the Environmental Health Sciences Fellowship program are available. However, a general evaluation of NIH training grant and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ENVIRONMENTAL HEALTH SCIENCES--RESEARCH GRANTS (AND CONTRACTS) (13.328)

Federal Agency:

HEW: National Institutes of Health, National Institute of Environmental Health Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241, and Section 301(c)

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$12,847,000	Grants	$11,386,000
	PSE $11,984,350[a]		PSE $10,621,000[a]
	$ 2,300,000[b]	Contracts	$ 755,000[b]
	PSE $ 291,793[c]		PSE $ 96,000[c]

Program Objectives and Operations:

To support research on the phenomena associated with the source, distribution, mode of impact, and effects of environmental factors on biological systems.

Research grants are intended to support the direct costs of a project, in accord with an approved budget, plus an appropriate amount for indirect costs. The grantee must participate in the cost of each research project. Cost-sharing agreements are negotiated with the grantee institution either on an individual basis or for all grants totally. Research contracts supplement and complement the Institute's intramural research program.

Eligible Appli[illegible]nts:

A university, college, hospital, public agency, or nonprofit research institution may submit an application and receive a grant for support of research by a named principal investigator. In exceptional cases, a grantee may be an individual in the U.S. Any scientifically qualified institution or organization within the guidelines of the Federal Procurement Regulations is eligible for a research contract.

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

[b] Research contracts which were not included in the Office of Management and Budget 1972 Catalog of Federal Domestic Assistance.

[c] Research contracts going to postsecondary institutions.

Primary Beneficiaries:

Same as applicant eligibility, including principal investigator.

Available Program Data:

A total of 140 research grants were awarded in FY 72. Research Program Project Grants for broadly based and usually long-term research went to a total of 13 institutions, one being a nonprofit organization; the rest of recipients included seven public and five private colleges and universities in FY 72.

University-based Center awards went to a total of six--including two public and four private--universities and colleges to provide long-term, stable (primarily core) support for broadly-based research and training in human health and related environmental activities.

Project Grants supporting discrete, specified, and circumscribed research projects performed by named investigators went to 64 institutions of higher education, 46 publicly and 18 privately controlled. Seven other kinds of nonprofit research organizations also received grants.

In addition, Research and Development Contracts authorized by Section 301(c) of the above legislation, were made to support fundamental research concerned with defining, quantifying, and understanding the effect of chemical, biological, and physical factors upon biological systems in relation to the health of man. A total of 14 organizations including seven noneducational bodies and seven colleges and universities were involved. Six of the schools were public and one was private.

Federal Evaluations/Studies:

No evaluations of the Environmental Health Sciences Research Grants program are available. However, two general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ENVIRONMENTAL HEALTH SCIENCES-TRAINING GRANTS (13.329)

Federal Agency:

HEW: National Institutes of Health, National Institute of Environmental Health Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$3,107,000	$3,394,000

Program Objectives and Operations:

To support the availability of high quality training opportunities in environmental health. The graduate research training program has a three-fold goal: (1) to increase the number of highly qualified scientists primarily concerned with environmental health; (2) to enable training institutions to strengthen and to enrich their research training capabilities; and (3) to expand opportunities for environmental health research training in U.S. graduate institutions.

Funds made available to the institutions may be used for both administrative and student expenses. Graduate training grants are intended to support the direct costs of a training program (including stipendiary support to named pre- and postdoctoral trainees), plus indirect costs, limited to 8 percent of direct costs. There are no formula and matching requirements.

Eligible Applicants:

A university, college, hospital, public agency, or nonprofit research institution may submit an application for the support of a research training program under the guidance of a named program director.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, only institutions of higher education received grants. The grantee institutions included 11 public and 16 private colleges or universities for a total of 27 schools. The number of trainees benefiting from the 35 grants awarded to institutions (also including organizations other than schools) totaled 269 pre-doctoral trainees, 15 professional and 32 academic postdoctoral trainees.

Federal Evaluations/Studies:

No evaluations on the Environmental Health Sciences Training Grants are available. However, a general evaluation of the National Institutes of Health (NIH) training grants and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

EYE RESEARCH--FELLOWSHIPS (13.330)

Federal Agency:

HEW: National Institutes of Health, National Eye Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c); P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,676,000 PSE $1,441,360(a)	$1,339,000 PSE $1,151,000(a)

Program Objectives and Operations:

To increase the number of teachers and scientists working full-time in the visual sciences.

Postdoctoral fellowships, special fellowships, and Research Career Development Awards are available. Postdoctoral fellowship stipend levels are based on relevant experience beyond the doctorate. Research training must be pursued on a full-time basis. There are no formula or matching requirements.

Eligible Applicants:

Applicants must be citizens or nationals of the U.S. or have been lawfully admitted for permanent residence. They must arrange for admission to an appropriate institution and acceptance by a sponsor.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Postdoctoral fellowships require a Ph.D., M.D., D.D.S., D.V.M., Sc.D., D.Eng., or equivalent degree. In FY 72, 54 of the fellowships were awarded at 34 institutions of higher education, including 15 public, 17 private, and two schools of other types of control. Two other organizations had fellows receiving these funds.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Special fellowships require a doctorate or equivalent degree and at least three subsequent years of relevant research or professional experience, or the completion of residency requirements in a medical specialty, or demonstration to the National Institutes of Health (NIH) of sufficient competence in his field to pursue the training programs. In FY 72, 53 of these fellowships were awarded at a total of 37 institutions, 29 of which were colleges and universities. Four of these schools were of an undetermined, joint, or multi-control; 12 were private and 13 were public.

Research Career Program Awards are also available and in FY 72, a total of 15 were awarded. Research Career Development Awards for the career enhancement of outstanding scientists with clear independent research potential were received at two private institutions of higher education and one other kind of organization. Modified Research Career Development Awards for fostering the development of young scientists with outstanding independent research potenial went to one organization and ten colleges and universities, four of which were public and six private. One private school benefited from the Research Career Awards program which is meant to enable institutions to finance positions favorable to the intellectual growth and research productivity of highly competent, established investigators.

Federal Evalutions/Studies:

No evaluations of the Eye Institute's Fellowships program are available. However, a general evaluation of NIH training grant and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

EYE RESEARCH--RESEARCH GRANTS (AND CONTRACTS) (13.331)

Federal Agency:

HEW: National Institutes of Health, National Eye Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended, and Title IV, Part F, Sec. 301(h), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$24,958,000	Grants	$21,668,000
	PSE $21,463,880(a)		PSE $18,634,000(a)
	$ 2,262,000(b)	Contracts	$ 363,000(b)
	PSE $ 2,122,000(c)		PSE $ 341,000(c)

Program Objectives and Operations:

To support research on the causes, prevention, diagnosis, and treatment of blinding eye diseases and visual disorders.

Participation by the grantee in the total direct cost of project is at least 5 percent. There is no limitation on the dollar value of grants. Research grants provide funds for salaries, supplies, travel, and other expenses, and afford the collateral benefits of enriching the training and experience of research workers. Contracts are used to support directed, short-term research or development projects.

Eligible Applicants:

Institutions eligible for support are those that present proposals concerned with laboratory and clinical research. Contracts may be awarded to both profit-making and nonprofit organizations, in accordance with Federal Procurement Regulations.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget, 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 421 of these research grants were awarded. A total of eight out of 11 Research Program Project Grants for broadly based, usually long-term research activity, went to four public and four private universities and colleges. Outpatient Clinical Research programs were established at a total of 11 institutions, eight of which were schools of higher education, four public and four private. Out of the 142 institutions that received Project Grants research projects in FY 72, 117 included 63 public and 51 private higher education centers and three more such schools under other types of control, including joint, multi-, or undetermined control. Conferences were also supported at one public and one private institution of higher education.

Additional research-related sponsorship is offered by the separately authorized Research and Development Contracts. These are used to support directed, short-term research and development projects which may result in either improved research capabilities or improvement of prevention, diagnosis and treatment of visual disorders. In FY 72, nine contracts were made with six private institutions of higher education for the above purposes.

Federal Evaluations/Studies:

No evaluations of the Eye Institute's Research Grants Program are available. However, two general studies are relevant here: (1) a study of the training impact of research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

EYE RESEARCH--TRAINING GRANTS (13.332)

Federal Agency:

HEW: National Institutes of Health, National Eye Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,998,000 PSE $2,758,160[a]	$2,984,000 PSE $2,745,000[a]

Program Objectives and Operations:

To establish, expand, or improve training opportunities for individuals interested in careers in research, teaching administration, and services in the visual sensory fields.

Training grants may include funds for equipment, personnel, stipends, and other costs to expand or improve an existing program or to establish a new program. There are no formula or matching requirements.

Eligible Applicants:

Public and other nonprofit scientific research institutions are eligible to apply. The grantee institution is responsible for the selection of trainees.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 46 training grants were extended for the benefit of 202 post-doctoral and 8 predoctoral full- and part-time trainees, according to Basic Data Relating to the National Institutes of Health. Recipient institutions included 38 schools and five other organizations for a total of 43. The number of private schools was 22 and public school grantees totaled 16.

(a)This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

No evaluations of the Eye Institute's Training Grants Program are available. However, a general evaluation of the National Institutes of Health (NIH) training grants and fellowship programs is described on p. 185 A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

GENERAL MEDICAL SCIENCES--FELLOWSHIPS (13.334)

Federal Agency:

HEW: National Institutes of Health, National Institute of General Medical Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 2411

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$15,606,000 PSE $14,669,640(a)	$16,488,000 PSE $15,498,000(a)

Program Objectives and Operations:

To help the nation's most promising young men and women obtain the extensive research experience and knowledge required for competence in key fields of biomedical investigation, and to assist their development as medical school faculty.

Funds cannot be used for training that leads to professional degrees. According to the Office of Management and Budget Catalog, no new applications for predoctoral fellowships are being accepted. Award for postdoctoral fellowships may include a basic stipend, dependency allowance, tuition costs, and certain supply funds. Special fellowships do not include dependency allowance. Career development funds are to provide the salary of the awardee as an employee of the sponsoring institution. There are no formula or matching requirements.

Eligible Applicants:

Candidates must be U.S. citizens or have permanent residency status. They must be nominated and sponsored by a public or private nonprofit institution. Education and experience requirements vary by type of fellowship.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

There are several specific fellowship programs under this general fellowship program. They include: (1) Postdoctoral Fellowships, which are awarded to those studying at the postdoctoral level; (2) Special Fellowships, which are awarded to those individuals in mid-career who must extend their research; (3) Minority Access to Research Careers (MAEC) Faculty fellowships, which provide special fellowships to selected faculty members from minority institutions to enable them to obtain advanced training in research; and (4) MARC Visiting Scientist fellowships, which provides special fellowships to visiting scientists who are interested in going to minority institutions to help them develop their research and academic programs in biomedical sciences.

In FY 72, 91 institutions received funds for Predoctoral Fellowships. These were all higher education instituions; 54 of them were public, and 37 of them were private. According to the National Institutes of Health Basic Data Relating to the National Institutes of Health, 300 predoctoral fellows received these awards. Committments to these fellows were made prior to the discontinuance of these fellowships.

One hundred and forty institutions and organizations received funds for Postdoctoral Fellowships. This included 117 higher education institutions and 23 other organizations and agencies. Of the higher education institutions, 57 were public, and 40 were private. Twenty higher education institutions under multi-, joint, or undetermined control, received funds for this program. A total of 396 trainees received Postdoctoral Fellowships.

Special Fellowships were distributed to 111 institutions and organizations. Of these, 95 higher education institutions received grants, as did 16 other agencies and organizations. The funds were distributed to 39 public and 33 private higher education institutions, as well as 23 institutions which had some other type of control or did not report on control. A total of 183 special fellowships were awarded to individuals conducting research in health-related fields.

A total of ten institutions received funds for the MARC Faculty fellowship. Nine of these were higher education institutions and one was another organization or agency. Four of the higher education institutions were public, and the remaining five were private.

One private higher education institution received funds for the MARC Visiting Scientist Fellowship.

Under this general program of fellowship grants are included grants in support of (1) Research Career Development Awards, and (2) Modified Research Career Development Awards, both for the development of young scientists, and (3) Research Career Awards for the stable financing of outstanding research investigators' positions at various institutions.

In FY 72, 56 institutions received Research Career Development Award grants. Fifty-two were higher education institutions. Thirty-two of these were public and twenty were private. A total of 96 individuals were beneficiaries of these awards.

One hundred and one institutions received grants for the Modified Research Career Development program. These included 95 higher education institutions and six other agencies. Of the institutions of higher education, 57 were public and 38 were private institutions. Two hundred and thirty-six young scientists were awarded funds to foster their development in careers of independent research in the sciences related to health. Approximately 255 awards were presented.

A total of twenty-four institutions received grants under the Research Career Award program. Twenty-three of those were of higher education institutions. Fifteen public higher education institutions and eight private institutions received funds. Thirty-two awards were distributed to 30 individuals in FY 72.

Federal Evaluations/Studies:

Evaluation studies applicable to both the training grants and fellowship programs are described on p. 248.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

GENERAL MEDICAL SCIENCES--RESEARCH GRANTS (AND CONTRACTS) (13.335)

Federal Agency:

HEW: National Institutes of Health; National Institute of General Medical Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410 as amended, and Title III, Section 301(h), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$103,528,000	Grants	$89,827,000
	PSE $ 95,245,760(a)		PSE $82,644,000(a)
	$ 4,814,000(b)	Contracts	$ 4,351,000(b)
	PSE $ 1,932,608(c)		PSE $ 1,740,400(c)

Program Objectives and Operations:

To increase the understanding of basic biological processes in health and disease, and to support the application of new biomedical knowledge and technology for the betterment of human health.

Funds are used for salaries and wages, equipment, supplies, travel, and other costs directly required to carry out the research projects. Grantees must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

Universities, colleges, hospitals, public agencies, nonprofit research institutions, or individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a)This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b)Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c)Research contracts going to postsecondary institutions.

Available Program Data:

In FY 72, the General Medical Sciences Division supported a variety of research programs through grants and contracts: (1) Research Program Project Grants, which usually encompass several research topics on a central theme; (2) Pharmacology-Toxicology Centers, which provide broad support for studies relevant to the development of a rational basis for the safe and effective use of drugs; (3) Anesthesiology and Diagnostic Radiology Centers, which support the development and broadening of research in these important areas of clinical medicine; (4) Genetic Centers, for the extension and application of basic genetic knowledge to human genetic disease; (5) Regular Research Projects, which are the usual mechanism for supporting individual research projects; (6) Conferences, which provide for international or national meetings, workshops, and the like; and (7) Research Contracts, for the procurement of research resources or services of a specified nature.

A total of 51 institutions received funds for Research Program Project Grants. These were distributed to 46 institutions of higher education, and to five other organizations and agencies, including research institutes, hospitals, social service organizations, and so forth. Twenty-seven public and 19 private higher education institutions received the grants.

Twelve Pharmacology-Toxicology Centers were awarded funds from this program. Only higher education institutions were awarded the funds; eight of these were public, and the remaining four were private.

In the Regular Research Grants program, a total of 249 institutions were awarded grants. Of these, 202 higher education institutions received funds, as did 47 other agencies and organizations, such as hospitals and social service associations. One hundred and eighteen public, and 76 private higher education institutions received these grants.

Three higher education institutions received grants for conferences, as did two other agencies or organizations. Two of these higher education institutions were private, and one was public.

In FY 72, nine institutions were awarded Research Contracts. Two of these were of higher education, and seven were other organizations or agencies. The two higher education institutions receiving the Research Contracts were private.

According to NIH's Basic Data Relating to the National Institutes of Health, a total of 1,212 research grants were awarded, as well as nine research and education contracts, to the various institutions.

Federal Evaluations/Studies:

Specific studies of the National Institute of General Medical Sciences research grants or contracts have not been made. However, two other general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants is described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

GENERAL MEDICAL SCIENCES--TRAINING GRANTS (13.336)

Federal Agency:

HEW: National Institutes of Health, National Institute of General Medical Sciences

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d); P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$43,746,000 PSE \$42,871,080[a]	\$45,585,000 PSE \$44,673,000[a]

Program Objectives and Operations:

To aid the development of research-trained scientific manpower required as faculty in the nation's medical schools, and to ensure continuing productivity in key fundamental and clinical fields of investigation basic to medicine and health.

Research training grants are awarded to eligible institutions under the responsibility of a training director. In FY 72, more than two-thirds of the available funds were used to provide direct trainee support consisting of stipends, dependency allowances, travel, and tuition. The remaining budget components provided support for expansion or improvement of the institutional environment where the training was done, and included total or partial salaries of faculty and technicians, research equipment, necessary supplies and, occasionally, renovation costs.

Eligible Applicants:

Public or other nonprofit institutions capable of conducting a scientifically meritorious program of training in health-related research.

Primary Beneficiaries:

Institutions and trainees.

Available Program Data:

In FY 72, the graduate training programs of the NIGMS provided grants to prepare individuals for research and academic careers in over a score of

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(a)This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

disciplines in the fundamental or applied health-related sciences. These include such basic disciplines as anatomy, behavioral sciences, biochemistry, biomedical engineering, biophysics, microbiology, nutrition, pharmacology, and pathology, and clinical areas such as anesthesiology, diagnostic radiology, and surgery. Grants went to 114 institutions, 105 of which were colleges and universities. A total of 66 of these schools were public and 39 were private. One noteworthy example is the Medical Scientist Training Program, which assisted 11 medical schools (two public; nine private) in the development of broad, institutionally-based programs that provide carefully selected trainees the combined basic scientific and medical background needed for a medical science research career.

According to Basic Data Relating to the National Institutes of Health, a total of 470 training grants involving 6,462 trainees were made. A total of 1,210 were postdoctoral scientists, and 5,252 were predoctoral.

Federal Evaluations/Studies:

A study of the effects of National Institute of General Medical Sciences' (NIGMS) training programs on graduate education in the biomedical sciences was completed on 1969 by the National Research Council's Office of Scientific Personnel. The study was sponsored by NIGMS and has relevance to both the training grants and fellowships programs. Conclusions were based on a combination of statistical analysis, records review, and recipient follow-ups.

Patterns and impact of NIGMS support on bioscience departments and on individual grantees were sought. It was noted that NIGMS support, including amount of stipend and dependency support, the percentage of doctorate-granting departments having trainees, and the median total months of support supplied to students varied considerably among the different bioscience fields. Regional distribution analysis indicated that the New England and Middle Atlantic states received proportionately more support than the West North Central, West South Central, and Mountain states. Also, private institutions received proportionately more NIGMS support than public ones.

Comparisons between NIGMS-supported departments and unsupported departments revealed that: (1) The gain in average Ph.D. production per department between 1958-1962 and 1963-1967 was significantly greater for the NIGMS-supported departments. (2) The number of Ph.D.-granting departments in the biosciences increased by one-third during the decade covered by the study. NIGMS training grant support was considered a major factor in the rapid departmental growth. Faculties have been increased, new courses offered, and important items of equipment obtained through training grant support. Thus, the NIGMS-supported departments have been strengthened, in addition to producing more Ph.D.'s.

Other comparisons between NIGMS-supported departments and those without support were also noted. In matched fields and departments, the time lapse from baccalaureate to Ph.D. attainment was one to two years less for NIGMS trainees and fellows than for non-NIGMS supported doctorate recipients. The total doctorate attainment rate also compared favorably with rates for other programs such as those of the NSF and the NDEA. A larger proportion of NIGMS-supported candidates assumed immediate postdoctoral research fellowships than did those without support from the same group of departments. The program appears to have had a beneficial effect even on those trainees who did not ultimately attain doctorate degrees, for 45 percent of this group found employment in universities or hospitals and were engaged in health-related activities. Thus, the program contributed skilled persons to the biomedical manpower pool in addition to those who attained the Ph.D.

Study findings compelled the conclusion that the NIGMS program had measurable positive impacts on both departments and students, and that it should be continued. Regarding award size, the study suggested that the stipend level for pre-Ph.D. NIGMS trainees be increased 25 percent initially, and thereafter be determined in relation to the cost-of-living index. It also proposed a cost-of-education allowance to be used in improving the research training capability of the department. It was felt that the policy of utilizing peer judgment by competent bioscientists serving on review and advisory committees should be continued, although a broader representation of the bioscience professional community was desirable. The investigators pointed out that the NIGMS program should have as one of its goals the provision of an opportunity for the educationally and culturally disadvantaged to pursue careers in biomedical research, accompanied by recognition that these students may need more support than those previously enrolled.

The study concluded that existing NIGMS basic policies were effective and should be continued. These were: (1) an emphasis on predoctoral training; (2) an attempt to balance support between ongoing programs and new programs in departments where quality can be developed; and (3) a continuation of departmental support for new programs for a minimum of five years.

Finally, the study noted that periodic evaluation of the NIGMS Graduate Research Training Grant Program was desirable and should include continuing data collection on all aspects of the program. The need for expert subjective evaluation will obviously continue.

Another study, on the education and employment patterns of bioscientists, was completed in February 1971 by the National Research Council's Office of Scientific Personnel. This study was also supported by NIGMS.

Through data collection and classification, the investigators compiled time-trend statistics describing the education and employment of bioscientists. An abstract of the study notes that almost two-thirds of academic doctorates awarded in FY 70 were in science and engineering fields, and that immediate postdoctoral study is almost entirely confined to the physical sciences and biosciences. Doctorate recipients who had received NIGMS predoctoral training support were much more likely to accept immediate postdoctoral fellowships or traineeships than were non-NIGMS supported Ph.D's. Very little field shifting occurred between doctorate and first postdoctoral job. FY 69 Ph.D. recipients generally utilized their graduate training in their employment. The study shows that there has been a somewhat downward trend in the number of persons supported by NIGMS programs since 1968.

Employment patterns of bioscientists show that they have a wide occupational distribution--about half to educational institutions, one-fourth to industry, and the remainder to governmental and nonprofit institutions.

Federal funding of basic and applied research increased rapidly from FY 58 through FY 66, but has since leveled off. Almost two-thirds of federal life-science research support comes from HEW, and although the funds had continued to increase through FY 69, it was at a decreasing rate.

A recent analysis of the manpower supply and demand situation in disciplines of concern to the training programs of NIGMS was issued in 1971 by the Office of the Director, NIGMS. The study, coordinated through the various NIGMS Training Committees, utilized data from a variety of sources in reaching its conclusions.

An abstract of the study noted that by 1980, a significant excess of Ph.D.'s is anticipated in nearly all scientific fields. The principal problem with such a generalized conclusion, however, is that it fails to estimate supply and demand in the more specialized areas so important to the National Institutes of Health (NIH) mission. Estimates for these specific areas are therefore necessary in making critical policy decisions.

This study determined that manpower assessments and recommendations for disciplines and specialties could be separated into three groups. The first covered those areas in which manpower needs for the next decade would exceed the supply available. There areas included anesthesiology, diagnostic radiology, clinical pharmacology, human genetics, nutrition, edipemiology, biometry, and medical scientist training program. According to the study, critical shortages demand that these areas be funded as rapidly as centers of high-quality training can be identified and established. Since the demand for physicians in the practice of clinical specialties is so great and the financial returns are so high, it is often difficult to recruit trainees at present stipend levels. However, a 20 to 30 percent input of highly trained research specialists into medical school faculty would have an extremely beneficial effect on the quality of research, education, and practice within these specialties.

The second group is that in which demand is approximately equal to supply. The present annual attrition rate will require a training program in the foreseeable future, but it appears that moderate annual increases (3 to 4 percent) can be readily absorbed into existing and planned programs. Anatomy, microbiology, pathology, pharmacology, surgery, bioengineering, genetics, and the behavioral sciences are presently in this category.

Demand which is less than potential supply makes up the third grouping. In the areas of biophysics, biochemistry, and physiology, the job market is approaching or has already arrived at the saturation level. This study suggests that scientists in these fields should be channeled into specialized areas where manpower shortages presently exist. This seems to be the most viable alternative, since curtailing current mechanisms of support in order to influence numbers of Ph.D. trainees will not decrease their numbers for several years. Conversely, cuts in the level of training grants will have a major impact on national programs that may be developed in the future.

Obviously, any overly narrow training of scientists resulting from concentration on short-term mission-oriented research grants as the primary means of graduate support should be avoided. This would ultimately make it difficult for science trainees to proceed to new problems in the health field. Therefore, the study concluded that the NIGMS training grants program, with its continuous monitoring activities resulting in program adjustment, remains the most flexible and adaptable instrument through which the NIH can respond to projected needs for research personnel.

Another recently completed study, entitled "Postdoctoral Training in the Biomedical Sciences, An Evaluation of NIGMS Postdoctoral Training Programs," is being prepared for publication and should be available from NIGMS in 1974.

Several other general studies are also relevant: (1) a general evaluation of NIH training grant and fellowship programs is described on p. 185. (2) a general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is described on p. 185. Finally, a study, "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

HEART AND LUNG RESEARCH--FELLOWSHIPS (13.344)

Federal Agency:

HEW: National Institutes of Health, National Heart and Lung Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$5,623,000 PSE $4,779,550(a)	$6,760,000 PSE $5,747,000(a)

Program Objectives and Operations:

To increase the number of trained cardiovascular and pulmonary investigators and to assure the continuing flow of skilled and imaginative research workers into cardiovascular and related fields.

Fellowships are awarded for full-time research training. Fellows may utilize some of their time in academic and clinical duties if such work is closely related to their research training. Awards may cover the individual's stipend, dependence allowance, tuition and fees, and travel costs. There are no formula or matching requirements.

Eligible Applicants:

Applicants for postdoctoral research fellowships must have a doctoral degree. Applicants for special fellowships must have a doctoral or equivalent degree and at least three subsequent years of relevant research or professional experience, or have completed residency requirements in a medical specialty, or have otherwise demonstrated their competency. Applicants must be U.S. citizens or have permanent residency status. According to the National Institutes of Health (NIH), predoctoral fellowships are not currently available.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

In FY 72, at least 145 fellowship and 161 Research Career Program Awards were awarded, according to Basic Data Relating to the National Institutes of Health (NIH).

Postdoctoral fellowships providing research training support in health and health-related areas were distributed to 53 institutions, 46 of which were colleges and universities. These schools included 23 public and 17 private institutions and six schools under other kinds of control.

Special fellowships for the support of individuals in mid-career to extend research potential were received at 64 institutions, including 18 public, 20 private, and eight schools under other forms of control such as joint or an undetermined control.

Research Career Development Awards, which enhance the career development of outstanding independent researchers, went to individuals at 39 institutions which included 17 public and 17 private colleges and universities.

Universities and colleges at which Modified Research Career Development Awards for the development of young scientists with outstanding potential or independent research ability constituted 39 out of a total of the 47 institutions involved. Public schools totaled 22, while private schools numbered 17.

Of the 26 institutions at which Research Career Awards (for the financing of positions favorable to the intellectual growth and research productivity of highly competent scientists) were received, 23 were colleges and universities, of which ten were public and 13 were private.

Federal Evaluations/Studies:

An in-house study on extramural fellowship and training programs was completed by the National Heart and Lung Institute (NHLI) in July, 1970. The study reached its conclusions through a use of surveys, questionnaries, document analysis, inventory, and goals achievement analysis. An abstract of the study also included a section on research fellowships.

The NHLI research fellowship program has included three different kinds of awards. Predoctoral fellowships formerly encouraged more competent students to attain a doctoral degree and become interested in research and teaching in the cardiovascular field. In 1960, this program was transferred to the National Institute of General Medical Sciences. Postdoctoral fellowships are designed to increase the number and competency of young doctors for research and related academic activities in the cardiovascular field. The purpose of special fellowships is to provide more advanced or specialized research training and to enable individuals past the postdoctoral years to continue in research and become better qualified to obtain research support as principal investigators or coinvestigators on research grants. They will also become better qualified to teach and train others.

The subsequent professional courses of former predoctoral fellows show that the NHLI program was producing favorable results. For example, 1969 data show that:

1. 375 former predoctoral fellows had (by 1969) earned 369 doctoral degrees

2. 311 (83 percent) listed their primary professional activity as research or teaching

3. 245 (65 percent) were members of academic faculties, with 117 (31 percent) at medical schools

4. 35 predoctoral fellows were later awarded career development grants or established investigatorships

5. 172 (46 percent) became principal investigators on research grants.

The study also indicated beneficial program influence on the careers of postdoctoral fellows. Information from 1969 reveals that over half of those funded were on medical school faculties, most at the professorial level, and that, although only 10 percent listed research as their main activity, 35 percent (666 persons) had become principal investigators in research. The fellows were widely distributed geographically and in academic institutions.

As of 1969, only 12 percent of the special fellowship recipients listed research as their principal activity. Sixty-three percent were, however, principal investigators on research grants. Sixty percent of the group were in teaching, and 7 percent were or had been program directors on training grants. It should be noted that the former special fellows exceeded the other two groups in many relevant areas, including number of academic faculty positions, medical school faculty positions, professorial rank, and membership on NIH study section and review committees.

The study concluded that such data upheld the hypothesis that a program covering various levels of relevant research has a greater impact than a program covering only postdoctoral fellows.

Federal Evaluations/Studies:

A general evaluation of the NIH training grant and fellowship programs is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

HEART AND LUNG RESEARCH--PULMONARY ACADEMIC AWARDS (13.382)

Federal Agency:

HEW: National Institutes of Health, National Heart and Lung Institute

Authorizing Legislation:

National Heart Act, Public Health Service Act, as amended, Sec. 301(d), P.L. 80-655; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$728,000	$598,000

Program Objectives and Operations:

To develop academicians and research workers in pulmonary diseases and to assist schools in strengthening their teaching programs.

Any academic school of medicine may apply to support a candidate for such a position. Candidate must have some research and clinical experience in the respiratory diseases and propose plans to improve this field in his institution. Only one award may be made to a school. There are no formula or matching requirements.

Eligible Applicants:

Accredited medical schools that have plans for improving teaching and research in pulmonary diseases.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, all recipients of these funds were colleges and universities. A total of 16 schools participated in this program, seven of which were public and nine of which were private.

Federal Evaluations/Studies:

No evaluations of the Pulmonary Academic Awards program are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

HEART AND LUNG RESEARCH--RESEARCH GRANTS (AND CONTRACTS) (13.346)

Federal Agency:

HEW: National Institutes of Health, National Heart and Lung Institute

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended, and Title IV, Section 413(c), P.L. 92-423; 42 U.S.C. 241, 287

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$114,674,000 PSE $ 91,739,000(a)	Grants	$87,543,000 PSE $82,612,000(a)
	$ 44,599,000(b) PSE $ 27,651,380(c)	Contracts	$18,708,000(b) PSE $11,598,960(c)

Program Objectives and Operations:

To foster research on cardiovascular, blood, pulmonary, and renal diseases.

Funds are used primarily to support additional personnel, equipment, supplies, and hospital charges as necessary to accomplish research efforts. Grantees must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

Any nonprofit organization engaged in health-related research may apply. An individual scientist may qualify if he has adequate facilities for the conduct of the research. Contracts may be awarded to public or private health or educational entities to carry out specific projects.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts. For the PSE figures for Specialized Research Centers, see p.

(b) Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary institutions.

Available Program Data:

In FY 72, research grants went to support several varieties of activities. Research Program Project Grants for support of broadly based and usually long-term programs of research activity totaled approximately $34,000,000. These grants were distributed to 59 institutions, 45 of which were colleges and universities, 27 of them public and 18 private.

Project grants supporting specified projects performed by named investigators were received at a total of 323 institutions and amounted to around $67,000,000. Of the 182 higher education institutions receiving funds, 105 were public, 68 were private, and nine were under multi-, joint, or undetermined control.

Programs for the funding of Sickle Cell Centers were established to focus resources, facilities, and manpower in a coordinated attack on high-priority sickle cell disease problems. About $5,000,000 was given for the above purposes to 10 institutions, including nine colleges and universities. Six of these were public and three were private.

Research and Development Contracts comprised an additional authorized and funded research activity of the National Heart and Lung Institute (NHLI). These contracts were for the promotion of rapid solution to urgent clinical problems and the development of better artificial replacement and assistant devices for cardiovascular, pulmonary, blood, and renal organs. A total of 261 contracts were made with 166 centers, including 41 public and 40 private schools and one under another kind of control. These contracts involved approximately $45,000,000 worth of awards.

The financing of international or national meetings, conferences, and workshops is an additional activity sponsored by the research programs of the NHLI. In FY 72, monies as separated from the programs for conferences totaled $118,000. These funds were awarded to eight institutions, four of which were higher education centers. Three of these schools were public; one was private; and one under other control.

Federal Evaluations/Studies:

No evaluations of the NHLI Research Grants program are available. However, two general studies are relevant here: (1) a study of the training impact of National Institutes of Health (NIH) research grants described on p. and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

HEART AND LUNG RESEARCH--SPECIALIZED RESEARCH CENTERS (SCOR) (13.374)

Federal Agency:

HEW: National Institutes of Health, National Heart and Lung Institute

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$20,584,000 PSE $19,554,800(a)	$16,941,000 PSE $16,094,000(a)

Program Objectives and Operations:

To expedite the development and application of new knowledge essential for improved diagnosis, treatment and prevention of arteriosclerosis, thrombosis, hypertension, and pulmonary diseases.

Funds are used primarily to support personnel, equipment, supplies and hospital charges. Restrictions are imposed against new construction. Grantees must participate in the cost of each research project. Cost-sharing agreements are negotiated with the grantee.

Eligible Applicants:

Any nonprofit organization engaged in health research that has an organizational unit dedicated to one of the specified research areas. Approaches may include fundamental multidisciplinary aspects, as well as clinical applications and trials.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, awards for SCOR went to a total of 33 centers of higher education, including 14 public and 19 private schools. Three other kinds of institutions also received funds from this program. According to Basic Data Relating to the National Institutes of Health, a total of 44 grants were distributed.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

A report by the National Heart and Lung Institute (NHLI) Task Force on arteriosclerosis, a subject of study in specialized research, was completed in June, 1971. Conclusions and recommendations were reached by utilizing a combination of techniques, including technology assessment, statistical analysis, and systems analysis.

In the United States today the chief cause of death is arteriosclerosis. The development of a long-range plan to combat this disease was initiated in July, 1970, with the goal of reviewing current knowledge and formulating a program aimed at improved prevention and control of the disorder and effective treatment of its complications. Major findings are as follows.

According to the investigators, present federal involvement is completely inadequate for the magnitude of the problem, for several reasons, including sparse and discontinuous funding, a dearth of long-range planning, and uncoordinated programming. Progress in reducing morbidity and mortality is likely to be erratic and inconsistent under such conditions. Therefore, NHLI should be directed to develop, promote, and support a comprehensive program for the prevention of arteriosclerosis. The study also suggested that the President be requested to appoint a continuing national commission for the prevention and control of this disease.

Specific recommendations included the establishment of: (1) national centers for the prevention of arteriosclerosis; (2) five to ten cardiovascular disease prevention clinics; and (3) an Office of Education to serve as a clearinghouse for information concerning arteriosclerosis. The Task Force also recommended that clinical trials be conducted to examine the effects of modifying the most important risk factors--hyperlipidemia, hypertension, and cigarette smoking--in the primary prevention of the complications of arteriosclerosis.

The study concluded with an emphasis on the need for basic research by well-trained and equipped working teams, and for a system of international information exchange on current discoveries in the field.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

HEART AND LUNG RESEARCH--TRAINING GRANTS (13.345)

Federal Agency:

HEW: National Institutes of Health, National Heart and Lung Institute

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$15,849,000	$14,665,000
	PSE $13,947,120(a)	PSE $12,905,000(a)
	PSE $ 2,705,648(b)	PSE $ 2,503,000(b)

Program Objectives and Operations:

To support the training of research specialists in cardiovascular, pulmonary, and renal diseases.

Funds may be used to support training staffs, trainee stipends, supplies, equipment, and travel as necessary to accomplish the objectives of the training program. There are no formula or matching requirements.

Eligible Applicants:

Any organization with approved graduate courses in health.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a total of 360 research training grants were distributed for the benefit of 875 postdoctoral and 548 predoctoral full- and part-time trainees according to Basic Data Relating to the National Institutes of Health.

(a) This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) This figure is the total amount of money awarded to postsecondary Institutions for Undergraduate Training Grants, not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

Out of the 101 recipient institutions, 76 were colleges and universities. Those schools under public control totaled 43 and those under private control totaled 33.

Additional training sponsorship is found under Undergraduate Training Programs which assist qualified institutions to improve and expand the training of undergraduate students in disciplines relating to the heart and lung. A total of $2,705,648 was distributed to 102 universities and colleges, the only type of institutions receiving funds in FY 72. There were 56 public and 46 private school recipients.

Federal Evaluations/Studies:

An in-house study on extramural training programs was completed by the National Heart and Lung Institute (NHLI) in July, 1970. An HEW abstract shows that the study reached its conclusions through a use of surveys, questionnaires, document analysis, inventory, and goals achievement analysis. This study also included a section on graduate research training grants.

The NHLI grant program was initiated in 1949 with the goals of producing increased cardiovascular manpower, both clinical and preclinical and of providing research training and experience to physicians going into academic medical activities involving cardiovascular research. The program was also interested in supplementing the medical research manpower with non-medical research manpower (Ph.D.'s, etc.) trained in areas important to cardiovascular clinical problems.

Available data has revealed that, although only 361 out of 4,905 former indirect trainees made research their main activity, 692 out of 7,077 became principal investigators on research grants. Since many more than principal investigators participate in grant-supported research, this suggests that the research activities of the former trainees and others associated with them is much greater than shown by the 1969 data. This data also revealed that 3,889 of the 4,905 former trainees (79 percent) whose main activities were known, had research, teaching, or hospital service as a main activity.

The study concluded that the NHLI graduate training grant program has been instrumental in bringing cardiovascular research experience to medical, academic, and hospital faculties and staff.

Also relevant here is a general evaluation of the National Institutes of Health (NIH) training grants and fellowship programs described on p. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

BIOMEDICAL SCIENTIFIC PUBLICATIONS GRANTS AND BIOMEDICAL COMMUNICATIONS RESEARCH CONTRACTS (13.349)

Federal Agency:

HEW: National Institutes of Health, National Library of Medicine

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 390(b)7 and 398, P.L. 91-212, as amended; and Title III, Part i, Section 381; 42 U.S.C. 280b-9(a)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,000,000	$ 310,802(a) $2,092,742(b)	$ 216,000(a) $1,624,000(b)

Program Objectives and Operations:

To assist the health professions by making available biomedical information of significance to the national health effort.

Support may be requested for direct costs as specified under National Institutes of Health (NIH) and National Library of Medicine (NLM) policies and regulations, including equipment, supplies, publication costs, salaries, consultant fees and expenses, and travel, etc. There are no formula or matching requirements.

Eligible Applicants:

Appropriate public or private nonprofit institutions of higher education may apply in behalf of the principal investigator on the project, and, in unusual circumstances, individuals may apply directly.

Primary Beneficiaries:

The health professions.

Available Program Data:

Primary or secondary journals, bibliographies, critical reviews, and monographs may be supported in the field of biomedical communications. Nineteen projects were supported by the grants.

(a) FY 72 funds for Biomedical Scientific Publications Grants, which were distributed only to postsecondary institutions.

(b) FY 72 figures for Biomedical Communication Research Contracts.

Research contract funds were distributed to a total of 58 institutions, including 17 higher education institutions, of which 12 were public and five were private. The funds were used for the development of new communications technology for the storage, retrieval, or transmittal of biomedical information, or for the application of existing technology in innovative ways, for the support of biomedical research, education, or health care. According to *Basic Data Relating to the National Institutes of Health*, 68 research and educational contracts were awarded to the various institutions.

Federal Evaluations/Studies:

No evaluations of the NLM Biomedical Scientific Publications Grants program are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

MEDICAL LIBRARY ASSISTANCE--LIBRARY RESOURCE GRANTS (13.348)

Federal Agency:

HEW: National Institutes of Health, National Library of Medicine

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 390(b) 5 and 396, P.L. 91-212, as amended; 42 U.S.C. 280b-7

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$4,000,000	$2,508,000 PSE $1,503,000	$2,356,000 PSE $1,411,000[a]

Program Objectives and Operations:

To expand and improve basic medical and health-related library resources and health information services necessary to facilitate the dissemination and utilization of knowledge in the health science field.

A resource improvement grant may be made to establish a hospital library or to expand or improve present libraries which have inadequate resources relative to their needs and user population. A resource project grant may be made to stimulate libraries to implement plans for service improvements or projects which facilitate the library's technical operations. There are no formula or matching requirements.

Eligible Applicants:

Any public or private nonprofit institution which maintains or plans to establish a health science collection to serve clientele in the health professions or the fundamental and applied science related thereto.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There are three specific programs under this general grant program: (1) Medical Library Resource Grants which provide for the expansion and improvement of the basic medical library or related resources; (2) Resources Improvement Grants, which are one-year, nonrenewable grants used to establish a library or expand or improve present libraries; and (3) Resources Project Grants, which provide support for those institutions with medical libraries which meet minimal standards in terms of staff, collection, and institutional support, and who propose a plan for the development or improvement of services.

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

In FY 72, a total of 134 institutions and organizations received Medical Library Grant Resource program funds. Of these institutions, 44 were of higher education, with 27 public and 17 private.

Resources Improvement Grants were distributed to a total of 179 institutions and agencies, ten of which were higher education institutions, eight public and two private.

Resources Project Grants were distributed to 31 higher education institutions and 20 other agencies and organizations. Twenty-four of the higher education institutions that received funds were public, and seven were private.

Federal Evaluations/Studies:

No evaluation specific to the National Library of Medicine Library Resources Grants program has yet been completed.

MEDICAL LIBRARY ASSISTANCE--RESEARCH GRANTS (13.351)

Federal Agency:

HEW: National Institutes of Health, National Library of Medicine

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 390(b)4 and 395, P.L. 91-212, as amended; 42 U.S.C. 280b-6

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$3,000,000	$639,689 PSE $572,000(a)	$835,000 PSE $746,490(a)

Program Objectives and Operations:

To assist the processing and dissemination of health information through support of innovative research, development, and demonstrations in biomedical information science and medical library science, techniques, systems, and equipment.

Funds are allocated for direct cost of the projects, including equipment, supplies, personnel, travel, etc. Grantees must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

Public or private nonprofit institutions and individuals with research capabilities in health information fields.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Research Project Grants program supports specified projects in the area of biomedical information science, research and demonstration, and the development of medical library science, techniques, systems, and equipment.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

In FY 72, a total of 24 institutions and agencies received funds for project grants. Eighteen of these institutions were of higher education; seven were public and 11 were private.

Federal Evaluations/Studies:

No evaluations of the National Library of Medicine Research Grants program are available.

Information Source:

References used for this program description are listed in the bibliography and are numbered as follows:

56.

MEDICAL LIBRARY ASSISTANCE--SPECIAL SCIENTIFIC PROJECT GRANTS (13.352)

Federal Agency:

HEW: National Institutes of Health, National Library of Medicine

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 390(b) 3 and 395, P.L. 91-212, as amended; 42 U.S.C. 280b-5

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$500,000	$100,397	$35,000

Program Objectives and Operations:

To support outstanding individual scientists and health practitioners for scholarly studies in the analysis and evaluation of major developments and advances in the health sciences and related national goals, concerns, programs, and problem areas.

Special scientific project grants provide support for scholarly assessment, description, and synthesis of topics of broad health interest. Work can be on the scientific, political, economic, and cultural aspects of human health. Salary, secretarial assistance, supplies, travel, and related direct costs of research and writing are covered. There are no formula or matching requirements.

Eligible Applicants:

Outstanding scientists and scholars in health sciences and other disciplines related to health, or appropriate public or private nonprofit institutions in behalf of such individuals. Applicants must be U.S. citizens.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, four higher education institutions received funds under the Special Scientific Project Grants program. Three of the higher education institutions receiving funds were public and the remaining one was private. Only higher education institutions received these grants.

Federal Evaluations/Studies:

No evaluations of the National Library of Medicine Special Scientific Project Grants are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

MEDICAL LIBRARY ASSISTANCE--TRAINING GRANTS (13.353)

Federal Agency:

HEW: National Institutes of Health, National Library of Medicine

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 390(b) 2 and 394, P.L. 91-212, as amended; 42 U.S.C. 280b-4

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,750,000	$1,233,517 PSE $1,152,000[a]	$766,000 PSE $485,760[a]

Program Objectives and Operations:

To provide assistance for training health science information specialists, medical librarians, historians of medicine, and other personnel required for the organization, management, and dissemination of health science information, and for research and service careers.

Funds are used predominantly to support trainees, including tuition, fees, stipends, and dependency allowances, travel, etc. Costs to develop and maintain the programs may also be provided, including staff salary costs, supplies, materials, etc. There are no formula or matching requirements.

Eligible Applicants:

Training grants are made to established educational institutions and medical libraries located in the U.S., its territories, and possessions. Trainee or fellowship applicants must be citizens or noncitizen nationals of the U.S. or have permanent residency status.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Three specific programs are supported by grants furnished under the general Training Grants program: (1) Postdoctoral Fellowship program, which provides postdoctoral research training support in health information and health-related areas; (2) Special Fellowship program, which provides support for those individuals in mid-career to extend their research and career development; and (3) Graduate Training program, which assists and extends the training of individuals preparing for research and academic careers.

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[a] This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Postdoctoral Fellowships were distributed to two higher education institutions, both of them public.

Special Fellowships were distributed to one higher education institution.

Twelve higher education institutions received funds from the Graduate Training program. Seven of the institutions were public, and five were private. Only higher education institutions received these funds.

Federal Evaluations/Studies:

The National Library of Medicine (NLM) completed an in-house study of its training grant program in 1971. The project sought to provide data relating to the program and its grant recipients over the period, 1965-71. According to an abstract, the project's methodology consisted of an analysis of training grant program files, summaries of relevant reports and meetings, and a follow-up survey of trainee employment.

The study found that the NLM grant program had made a significant impact on the field of biomedical librarianship and information science. In fact, a majority of the employees entering those fields in 1971 were the products of the program. Data obtained suggested that current manpower problems in medical librarianship and biomedical information science no longer deal with the numbers of trained individuals, but rather with the quality of their training and the acquisition of new skills. A need for more researchers was recognized, as well as the need to train more health professionals in biomedical communication. Advanced degree training programs in the area of educational technology, multi-media, and the biomedical informational sciences should be encouraged. The study concluded that such program improvements as these would help to alleviate the present crisis in terms of "quality" in the profession.

As a formal continuation of this in-house study, NLM issued a contract (NIH 72-4732) to evaluate the training grant programs for medical librarianship.

Information Sources:

References used for this program description are listed in bibliography and are numbered as follows:

56, 70.

NEUROLOGICAL DISEASES AND STROKE--FELLOWSHIPS (13.354)

Federal Agency:

HEW: National Institutes of Health, National Institute of Neurological Diseases and Stroke

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$3,006,000 PSE $2,465,000[a]	$3,436,000 PSE $2,818,000[a]

Program Objectives and Operations:

To provide financial assistance during periods of postdoctoral and advanced specialized training in the sciences pertinent to research and teaching in the neurological and communicative disorders.

These fellowships are for support of the fellow and his dependents, but the amount awarded can also include funds for tuition and laboratory fees. Tuition may be used only for that purpose, and unused funds must be returned to the Institute. There are no formula or matching requirements.

Eligible Applicants:

Fellows must be U.S. citizens or have been permanently admitted for residence. The applicant must make necessary arrangements with an appropriate institution and be accepted by a sponsor.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Both postdoctoral and special fellowships are available under this program. In addition, a Fellowship Traineeship, which is a special fellowship for

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(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

research training in health and health-related areas, is supported under the general fellowship program. The Direct Traineeship program, which is a special traineeship for research training for individuals with a clinical training, or its equivalent, is also included under this general program.

In FY 72, 60 institutions and organizations received awards from the National Institutes of Health. Fifty-two were institutions of higher education. Of these, twenty-five were public, 20 were private, and seven were under undetermined control, or some other nonpublic, nonprivate control.

Special Fellowships were distributed to 18 institutions and organizations. Fifteen higher education institutions received funds, as did three other agencies or organizations. Two of the higher education institutions were public, two were private, and three were under either undetermined, or nonprivate, nonpublic control.

Nine higher education institutions, out of a total of 15 institutions and organizations, received funds for the Fellowship Traineeship program. Four of the higher education institutions were public, and five were private.

A total of 56 organizations and institutions received funds for the Direct Traineeship program. Forty-five of these were institutions of higher education; 19 were public, 21 were private, and five were under undetermined or nonpublic, nonprivate control.

According to Basic Data Relating to the National Institutes of Health, 252 postdoctoral research fellowships, and 23 special fellowships, including the traineeships, were awarded to the various institutions and organizations.

Also in FY 72, several other programs were administered under the Research Career Awards program: (1) Research Career Development Awards, which enhance the development of outstanding scientists who require additional training; (2) Modified Research Career Development Awards, which foster the development of young scientists; (3) Research Career Awards, which enable institutions to finance positions favorable to established investigators.

In FY 72, 15 higher education institutions received grants under the Research Career Development Award. Seven of these were public and eight were private. Only higher education institutions received these funds.

Monies for the Modified Research Career Development Award were distributed to a total of 29 institutions and agencies. Twenty-seven were institutions of higher education, of which 14 were public and 13 were private.

Twelve higher education institutions received funds for the Research Career Awards. Five of these were public higher education institutions, and seven were private. Only higher education institutions received grant awards.

A total of 80 Postdoctoral Research Career Program awards were distributed to the various grantees.

Federal Evaluations/Studies:

No evaluations of the National Institute of Neurological Diseases and Stroke Fellowship programs are available. However, a general evaluation of National Instituites of Health training grant and fellowship programs is described on p. 185.

Information Source:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

NEUROLOGICAL DISEASES AND STROKE--RESEARCH GRANTS (AND CONTRACTS) (13.356)

Federal Agency:

HEW: National Institutes of Health, National Institute of Neurological Diseases and Stroke

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d) and (h), and Title III, Sec. 301(h), P.L. 78-410, as amended; 42 U.S.C. 241 and 241(h)

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$69,281,000 PSE $60,274,000(a)	Grants	$60,795,000 PSE $52,891,000(a)
	$ 8,260,000(b) PSE $ 6,136,000(c)	Contracts	$ 5,621,000(b) PSE $ 4,176,000(c)

Program Objectives and Operations:

To support research on the causes, prevention, diagnosis, and treatment of neurological, communicative, muscular, and sensory disorders other than vision.

Research grants are awarded to an institution in the name of one or more individual investigators. The grants may be used to provide assistance, supplies, and equipment for research. The grantee must participate in the cost of each research project. Cost-sharing agreements are individually negotiated with the grantee.

Eligible Applicants:

Any university, medical school, hospital, or nonprofit institution or, in the case of contracts, any organization or firm having an interest in pursuing research is eligible to apply. The proposals are reviewed for scientific merit, for evaluation of the qualifications of the applicant, for the adequacy of the research environment, and for the significance of the problem. With respect to contracts, any interested organization is invited to respond to a Request for Proposal (RFP) answering the requirements. Full instructions for preparation of proposals, with appropriate submittal deadlines, are included with the RFP.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

(b) Research contracts which were not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

(c) Research contracts going to postsecondary education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, several specific programs were administered under the general Neurological Diseases and Stroke Research Grant program: (1) Research Program Project Grants, which support broad-based and long-term research activities; (2) Outpatient Clinical Research Program, which aids in the establishment, improvement, and support of a research environment in which clinical studies can be conducted; (3) Project Grants, which support specific research projects; (4) Conferences, which support international or national meetings and workshops; and (5) Research and Development contracts.

Research Program Project Grants were distributed to 50 institutions and organizations, 43 of which were higher education institutions. Of these, 23 were publicly controlled, and 20 were privately controlled.

The Outpatient Clinical Research Program funds were distributed to four institutions, all of which were higher education institutions. Two of these were public, and two were private.

A total of 188 higher education institutions received funds under the Project Grants program. Seventy-six other organizations and agencies also received funds. Of the higher education institutions, 104 were public and 68 were private. In addition, 16 higher education institutions under other types of controls, such as joint-controlled, or multi-controlled, or undetermined controlled, received grants.

Funds were also provided for Conferences. A total of seven institutions and organizations received grants; two of these were higher education institutions. One of the higher education institutions was public, and the other one was private.

According to Basic Data Relating to the National Institutes of Health, 1,339 research grants were distributed to these various institutions.

Research Contracts are also included under the general Research Grants program. These contracts support specific research in related activities directed toward understanding the causes, prevention, diagnosis and treatment of neurological, communicative, muscular, and sensory disorders other than vision.

In FY 72, a total of 59 institutions and organizations received funds in the form of research and development contracts. Of these institutions, 29 were of higher education, including 17 public and 12 private. Sixty-seven research and development contracts were awarded to the institutions and organizations.

Federal Evaluations/Studies:

Five ongoing studies related to the research program of the National Institute of Neurological Diseases and Stroke are due to be completed in the winter of 1973. They are: (1) Manpower Resources and Needs in Neurology; Research, Teaching, Patient Services; (2) Manpower Resources and Needs in Neurological Surgery; Research, Teaching, Patient Services; (3) Manpower Resources and Needs in Otolaryngology; Research, Teaching, Patient Services; (4) Manpower Resources and Needs in Audiology and Speech Pathology; Research and Training; and (5) Manpower Analysis Study in Neurological and Communicative Sciences. These studies will be available from the Institute. In addition, two other general studies are relevant here: (1) a study of the training impact of National Institute of Health (NIH) research grants described on p. 180; and (2) a study of the manpower impact of NIH research grants described on p. 181.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

NEUROLOGICAL DISEASES AND STROKE--TRAINING GRANTS (13.355)

Federal Agency:

HEW: National Institutes of Health, National Institute of Neurological Diseases and Stroke

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$12,014,000 PSE \$11,293,160 (a)	\$11,812,000 PSE \$11,103,000 (a)

Program Objectives and Operations:

To assist training institutions in the recruitment and training of academicians, clinical and basic scientists, and community health leaders for careers in the area of neurological and communicative disorders.

Eligible Applicants:

Nonprofit institutions that have graduate training programs in the clinical and basic science disciplines concerned with neurological, neuromuscular, neurosensory, communicative, and related disorders.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Graduate Training Grants were distributed to 82 higher education institutions and 11 other agencies and organizations in FY 72. Forty-six of the higher education institutions were public and 36 were private.

According to Basic Data Relating to the National Institutes of Health, 817 postdoctoral trainees and 252 predoctoral trainees received awards.

Federal Evaluations/Studies:

No evaluations of this Training Grants program are available. However, a general evaluation of the National Institutes of Health (NIH) training grant and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a NIH study titled "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ANIMAL RESOURCES (13.306)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301 (d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$17,337,000 PSE $14,042,970(a)	$16,390,000 PSE $13,274,000(a)

Program Objectives and Operations:

To provide animal resources with which biomedical scientists can develop knowledge for prevention and control of disease in man through experimentation with animal models.

There are no formula or matching requirements.

Eligible Applicants:

Those eligible are public or nonprofit private institutions of higher education, hospitals, and other private nonprofit institutions seeking to establish, continue, or enlarge programs consistent with the objectives of the program.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 85 grants under this program went to a total of 57 institutions, nine of which included research institutes, hospitals, etc., and 48 of which were colleges or universities. A total of 28 public and 20 private institutions of higher education received aid.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Federal Evaluations/Studies:

A study entitled "Pilot Evaluation of Animal Resources Diagnostic Labs" is due to be completed in August, 1974, and may be obtained from the Division of Research Resources, National Institutes of Health.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ANIMAL RESOURCES--FELLOWSHIPS (13.367)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(c), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$125,000	$115,000

Program Objectives and Operations:

To contribute new knowledge to laboratory animal medicine. Training is not limited to a specific group of disciplines or specialties. Fellowship programs usually combine formal course work, seminars and research experience, but they are highly individualistic and may be formulated to meet individual requirements. There are no formula or matching requirements.

Eligible Applicants:

Applicants must be citizens or noncitizen nationals of the U.S. or have permanent residency status. Postdoctoral fellowship candidates must have at least three years research or professional experience or otherwise demonstrated competence.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Two specific programs were supported by grants furnished through the General Fellowships Program. These include: (1) Special Fellowships, which provide for those individuals in mid-career an opportunity to extend their potential for research; and (2) Postdoctoral Fellowships which provide for postdoctoral research training.

In FY 72, six Special and six Postdoctoral Fellowships were awarded. Ten of these awards provided support for professional postdoctorate study and two awards supported academic postdoctorate study.

Successful candidates for Special Fellowships were from five institutions of higher education, three of which were public and two of which were private.

Postdoctoral fellowships were awarded through six schools of higher education, all of which were public institutions.

Federal Evaluations/Studies:

No evaluations on this Fellowship program have been completed. However, a general evaluation of National Institutes of Health training grant and fellowship grograms is described on p. 185.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

ANIMAL RESOURCES--TRAINING GRANTS (13.368)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$352,000	$361,000

Program Objectives and Operations:

To support postdoctoral training in laboratory animal medicine. Projects are intended to prepare individuals for careers in medical care of animals in research environments, management of research animal facilities, and research on utilization of laboratory animals and their maintenance in laboratory environments. There are no formula or matching requirements.

Eligible Applicants:

Public or private nonprofit institutions capable of giving training in laboratory animal medicine, i.e., state and local research organizations and institutions, health professional schools, and institutions of higher education. Trainees must be citizens or noncitizen nationals of the U.S. or have permanent residency status.

Primary Beneficiaries:

The individual trainees.

Available Program Data:

In FY 72, an estimated 29 post D.V.M. trainees received support in laboratory animal medicine through eight schools of higher education; three public and five private. Awards totaling $352,000 were made.

Federal Evaluations/Studies:

No evaluations on the Animal Resources--Training Grants program have been completed. However, a general evaluation of National Institutes of Health (NIH) training grant and fellowship programs is described on p. 185. A general paper concerning NIH training programs and biomedical research manpower needs, 1972-1980, is also described on p. 185. Finally, a study, "Career Patterns and Utilization of Research Training" is due to be completed in the fall of 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 58, 70.

BIOMEDICAL SCIENCES SUPPORT GRANTS (13.310)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	($6,914,000)(a)	(a)

Program Objectives and Operations:

To assist nonhealth professional components of academic institutions in the maintenance, development, and advancement of their biomedical research capabilities.

Grantees must be engaged in health-related research and must have received a minimum of $200,000 in appropriate National Institutes of Health (NIH) and National Institute of Mental Health research project grants within the latest completed fiscal year. There are no formula or matching requirements.

Eligible Applicants:

Institutions of higher education (other than a health professions school), or separate colleges or campuses within a state university system, which are accredited.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Awards went to 117 colleges and universities in FY 72. Private schools supported totaled 45; public schools assisted totaled 72.

(a) Funds for this program are administered by the Division of Research Resources. Obligations and expenditures, however, are reflected in the accounts of the individual Institutes. Thus these funds shown are non-additive and are reflected in other obligations and expenditures of the Institutes.

Federal Evaluations/Studies:

Evaluations of the Biomedical Sciences Support Grants program are not available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

BIOTECHNOLOGY RESOURCES (13.371)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d) and 301(i), P.L. 78-410; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$10,924,000(a) PSE $ 9,503,880(b)	$10,329,000(a) PSE $ 8,986,000(b)

Program Objectives and Operations:

To assist academic and other nonprofit institutions in developing and sustaining sophisticated technological capabilities, such as computer centers, biochemical instrumentation resources, and biological material preparation resources which are vital to modern biomedical research and patient care.

Resources are intended to be on a very large scale, serving major multidisciplinary, multicategorical research programs. It is not intended that this program shall provide for research or training which can be obtained through the usual National Institutes of Health (NIH) programs. There are no formula or matching requirements.

Eligible Applicants:

Public or nonprofit private institutions of higher education, hospitals, and other private, nonprofit institutions with programs of biomedical research and specialized research services to many departments and disciplines.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Includes funds for Resource Related Research Projects--Biotechnology Resources.

(b) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

A total of 44 biotechnology resource grants provided for the establishment and operation of a research resource, including the primary equipment, professional staff, and related operating expenses. In FY 72, 36 institutions received support. Five grantees included organizations such as hospitals and public agencies, among others. The 31 other grantees included 16 public and 15 private institutions of higher education.

Other activities concerning the Biotechnology Resources Program include Resource-Related Projects which support research projects contributing to the improvement of the capability of resources to serve biomedical research. Grants for these projects totaled approximately $340,000 and went to two schools of higher education, one privately and one publicly controlled.

Federal Evaluations/Studies:

No evaluations of the Biotechnology Resources program are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

GENERAL CLINICAL RESEARCH CENTERS (13.333)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Sec. 301(d), P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$42,181,000	$39,878,000
	PSE $35,432,040(a)	PSE $33,498,000(a)

Program Objectives and Operations:

To create and sustain, on a stable basis, highly specialized institutional resources in which clinical investigators can observe and study human disease.

Grants pay the cost of renovation of facilities, equipment, hospitalization, core laboratory, salaries of center director, nurses, and technicians, and other operational costs. There are no formula or matching requirements.

Eligible Applicants:

Public or nonprofit private medical schools, research hospitals, and other medical institutions capable of carrying out well-designed studies in any preclinical science working with human patients are eligible.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Centers are an institutional resource where scientists from many departments correlate their laboratory studies with carefully controlled clinical investigations and analysis.

(a) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Out of the 73 institutions receiving a total of 83 awards in FY 72, 16 included entities such as hospitals and research foundations. Of the 57 colleges or universities receiving aid, there were 31 public and 26 private schools.

Federal Evaluations/Studies:

No evaluation of the Division of Research Resources General Clinical Research Centers program is available. However, a program evaluation is currently in the final stages of completion.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

GENERAL RESEARCH SUPPORT GRANTS (13.337)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act, Title III, Section 301(d); P.L. 78-410, as amended; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	($44,298,000) (a)	(a)
	PSE ($36,872,640) (b)	
	PSE $ 475,670 (c)	

Program Objectives and Operations:

To assist institutions in the maintenance, development, and advancement of their scientific research capabilities.

Application must be from an eligible institution that has received a minimum of $100,000 in appropriate National Institutes of Health (NIH) and National Institute of Mental Health grants within the latest complete fiscal year. There are no formula or matching requirements.

Eligible Applicants:

Health professional schools, non-federal hospitals, state and municipal health agencies, and other nonprofit, nonacademic research organizations engaged in health related research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Funds for this program are administered by the Division of Research Resources. Obligations and expenditures, however, are reflected in the accounts of the individual Institutes. Thus, these funds shown are non-additive and are reflected in the other obligations and expenditures of the Institutes.

(b) This estimated figure was derived by calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation amount.

(c) This figure is the total amount of money awarded to postsecondary institutions for additional project grants and conferences.

Available Program Data:

In FY 72, 339 grants were distributed among 276 institutions. Of the 122 institutions of higher education, 78 were public and 44 were private. Other entities, such as hospitals and health agencies receiving support totaled 154.

Federal Evaluations/Studies:

Professor Sidney Roth of the Office of Research Services, New York University, and Dr. G. Robert Boynton, Director of Laboratory of Political Research, University of Iowa, completed a study in 1969 on the General Research Grant Support Program (GRS) of the Division of Research Resources, NIH.

They conducted a review of the legislative history and informational files of the GRS program, and also interviewed more than 100 officials who had contributed to the development and evaluation of the program. Two institutional survey instruments were then developed--one for health professional schools and one for other health research institutions. Through these they asked questions about budget, staff size, corps of trainees, assessment of major GRS contribution to the institution, along with indications of how the program could be made more effective. The influence of the GRS program on individuals and their careers was determined by a second type of survey instrument, thus enabling a comparison between individuals and total institutional personnel.

According to the study abstract, a major purpose of the program was to allow more flexible utilization of available funds. It was found that many institutions believed the GRS was making a major contribution in providing funds for emerging opportunities and unexpected situations. GRS was the principal source of funding for pilot projects. GRS was also praised for facilitating institutional growth and development, for supporting innovative ideas, and for its role in support of young or new investigators.

A major goal of the GRS program was to attract additional means of support, and thereby to eliminate complete dependence on research project funds. Over a five-year period, GRS-funded research generated an additional $57,500,000 in nonfederal support and more than $90,000,000 in additional federal funds. At institutions that received GRS awards, expenditures for health research from all sources increased by more than 150 percent from 1960-61 to 1966-67, with GRS dollars accounting for less than 10 percent of the increase. The greatest amount of support came from the federal government and it also increased at a higher rate over this period than any other support element. GRS represented approximately 5-6 percent of federal health research funds, and less than 2 percent of all operating expenditures for participating institutions in 1966-67.

The study concluded that the importance of the GRS Program far transcends the dollar input, although its significance varies for certain classes of institutions. For example, dental schools are provided with a large share of research dollars by GRS, while medical school research projects receive a smaller proportion of support from GRS. It was suggested that alternative support programs for these several classes of institutions be explored, since it may be desirable to establish separate eligibility requirements for different types of institutions.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

56, 70.

MINORITY SCHOOLS BIOMEDICAL SUPPORT (MSBS) (13.375)

Federal Agency:

HEW: National Institutes of Health, Division of Research Resources

Authorizing Legislation:

Public Health Service Act of 1944 as amended, Section 301(d); 42 U.S.C. 241d

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	($2,000,000)[a]	(a)

Program Objectives and Operations:

To strengthen biomedical research and research training capability at minority institutions. The program is necessary so that minority groups have an equal opportunity to become researchers in biomedical fields, and to become better trained physicians, dentists, and other health professionals.

Funds may be used: (1) to enhance the biomedical research training environment of minority academic institutions; (2) to strengthen the faculties of minority institutions; (3) to renovate existing research facilities; (4) to service and purchase equipment; (5) to increase the number of minorities for health professional and graduate schools; and (6) to provide seed funds for support of exploratory research. There are no formula or matching requirements.

Eligible Applicants:

Four-year colleges, universities, and health professional schools in which a majority of student enrollments are drawn from ethnic minority groups.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There were 38 awards, totaling $2,000,000 in obligations, made to 38 universities or colleges with predominant minority student enrollments in FY 72. Public institutional recipients numbered 22 and private institutional grantees totaled 16. The two largest awards went to Atlantic University Center ($182,466) and Texas Southern University ($129,735).

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[a] Funds for this program are administered by the Division of Research Resources. Obligations and expenditures, however, are reflected in the accounts of the individual Institutes. Thus, these funds shown are non-additive and are reflected in the other obligations and expenditures of the Institutes.

Federal Evaluations/Studies:

No evaluations of the Minority Schools Biomedical Support program are available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

70.

HANDICAPPED EARLY CHILDHOOD ASSISTANCE (EARLY EDUCATION PROGRAM) (13.444)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Handicapped Children's Early Education Assistance Act, P.L. 90-538, as amended by P.L. 91-230; 20 U.S.C. 1423

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$51,500,000(a)	$7,500,000(b)	$6,687,000(b)

Program Objectives and Operations:

To support experimental preschool and early childhood programs for handicapped children.

Eligible Applicants:

Public agencies and private nonprofit organizations.

Primary Beneficiaries:

Handicapped children served by grantees.

Available Program Data:

Training of paraprofessionals, teachers, and volunteers was one of the services provided by the 67 projects funded in FY 72. Of the 7;470 total participants, 1,154 were paraprofessionals, 1,201 were Head Start personnel, 1,752 were public school teachers, 2,796 were nursery and day care personnel, and 567 were volunteers. Parents of handicapped children were included in many of the catagories above. Of the paraprofessionals who received training, 195 who were unemployed prior to training were working after completing the program.

(a) Includes Early Childhood Regional Resource Centers (p. 306) and Deaf-Blind Centers (p. 300), which are all authorized in one lump sum.

(b) Funds distributed to the projects are not designated for specific purposes. Therefore, the funds used only for training are integrated with funds used for other services and cannot be separated.

Federal Evaluations/Studies:

A comprehensive evaluation of this program is currently being made by Battelle Memorial Institute and will be available to the public in early 1975.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HANDICAPPED INNOVATIVE PROGRAMS--DEAF-BLIND CENTERS (REGIONAL CENTERS FOR DEAF-BLIND CHILDREN) (13.445)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part C, Section 622, P.L. 91-230; 20 U.S.C. 1422

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$51,500,000(a)	$7,500,000	$3,840,000
	PSE $ 146,167	PSE $ 72,960(b)

Program Objectives and Operations:

To establish regional centers to provide all deaf-blind children with: (1) comprehensive diagnostic and evaluative services; (2) a program for their education, adjustment, and orientation; and (3) effective consultative services for their parents, teachers, and others involved in their welfare.

Grants may be used to provide the services listed above and also, inservice training, dissemination of materials and information, and construction.

Eligible Applicants:

Public and nonprofit agencies, organizations, or institutions.

Primary Beneficiaries:

Residential or day schools; institutions of higher education; children's agencies; medical or research facilities; state educational agencies; organizations or institutions.

Available Program Data:

In FY 72 there were 10 centers, which based at private institutions, state departments of education, state departments of special education, and deaf-blind elementary and secondary schools. Approximately 600 teachers, paraprofessionals, and parents were trained in FY 72.

(a) Includes Early Education program (p. 298), Regional Resource Centers, (p. 306), and Deaf-Blind Centers.

(b) This estimated figure was derived by calculating the PSE percentage of the total obligation and applying that percentage to the total expenditures.

Federal Evaluations/Studies:

According to the Office of Education's Annual Evaluation Report there have been no evaluations conducted on this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HANDICAPPED MEDIA SERVICES AND CAPTIONED FILMS (CAPTIONED FILMS FOR THE DEAF) (13.446)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part F, P.L. 91-230; 20 U.S.C. 1452

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$10,478,000[a]	$11,706,000[a]

Program Objectives and Operations:

To maintain a free loan service of captioned films and instructional media for the educational, cultural, and vocational enrichment of the deaf. The program also provides for acquisition and distribution of media materials and equipment; provides contracts for research into the use of media; and trains teachers, parents, and others in media utilization.

Eligible Applicants:

State or local public agencies and schools, organizations, groups of deaf persons, and public or other nonprofit institutions of higher education.

Primary Beneficiaries:

Schools, churches, clubs, and other organizations of deaf persons.

Available Program Data:

In FY 72, three general entertainment and educational film distribution centers and 60 educational film depositories provided a delivery service of captioned films to deaf children and adults and also teacher-training films. A service of supplying films to teacher-training programs was expanded to include 24 national and international film studies on education of the deaf and of the retarded.

In FY 72, 19 media programs at postsecondary institutions and 44 teacher-training programs received media services.

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[a] The Bureau of Education for the Handicapped states that it is impossible to separate from the total obligation and expenditure figures the portion that serviced postsecondary institutions.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HANDICAPPED PHYSICAL EDUCATION AND RECREATION TRAINING (13.448)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI Part D, Section 634, P.L. 91-230; 20 U.S.C. 1401

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$87,000,000(a)	$920,000	$665,660(b)

Program Objectives and Operations:

To improve the quality and increase the supply of physical education and recreation personnel trained to work with the handicapped.

Grants may be used for undergraduate, graduate, or summer traineeships, special study institutes, program development grants, and special projects. Funds may be used for students' stipends, dependency allowances, and institutional support.

Eligible Applicants:

Public and other nonprofit institutions of higher learning.

Primary Beneficiaries:

Personnel who are engaged, or preparing to engage, in employment as physical educators or recreation personnel for the handicapped.

Available Program Data:

By Fall, 1972, an additional 120 specialists were placed in schools and community physical education recreation programs to serve handicapped children. Twenty-seven training programs in 1972 trained approximately 450 specialists. Five additional programs developed curriculum for training. Direct aid was awarded to 33 undergraduate students and summer trainees, 161 master's candidates, and 42 post-master's students.

(a) Authorized for all Part D programs in a lump sum.

(b) This estimated amount was derived by first calculating the proportion (2.7 percent) which the Handicapped Physical Education and Recreation Training was of the total obligations for all Handicapped Manpower programs and applying the percentage to the total amount expended for all manpower programs.

Federal Evaluations/Studies:

There are no recent studies of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HANDICAPPED REGIONAL RESOURCE CENTERS (13.450)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part C, P.L. 91-230; 20 U.S.C. 1421

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$51,500,000[a]	$3,550,000	$2,447,000
	PSE $ 837,088	$ 575,045[b]

Program Objectives and Operations:

To establish and operate regional resource centers which provide advice and technical services to educators for improving education of handicapped children.

Eligible Applicants:

Institutions of higher education, state education agencies, or combinations of such agencies or institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Of the four awards made in FY 72, two went to universities: Auburn University, Alabama, and the University of Utah.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that no formal evaluations have been conducted of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

(a) Includes Early Education Projects (p. 298) and Deaf-Blind Centers (p. 300).

(b) The estimated figure was derived from calculating the postsecondary education component of the total obligations and applying that percentage to the total expenditure figure.

HANDICAPPED--RESEARCH AND DEMONSTRATION (13.443)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part E, P.L. 91-230; 20 U.S.C. 1441

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$35,500,000[a]	\$10,876,296 PSE \$ 5,827,519	\$1,923,681[b]

Program Objectives and Operations:

To improve the education of handicapped children through research and demonstration projects.

Eligible Applicants:

State or local educational agencies, public and private institutions of higher learning, and other public or private educational or research agencies and organizations.

Primary Beneficiaries:

Handicapped children served by grantees.

Available Program Data:

Of the 45 awards made in FY 72, 26 were made to postsecondary institutions. For example, three were model demonstration programs in the area of postsecondary school vocational training for hearing-impaired youth. A total of 180 students received training in these three programs.

Federal Evaluations/Studies:

Although there have been no formal evaluations of this program, a recently concluded management evaluation identified the following areas where improvement is needed: (1) definition of program goals and objectives; (2) selection of research projects for funding; and (3) monitoring of ongoing research projects.

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[a] Authorized for all Part E programs.

[b] The postsecondary education component of the total expenditure amount is unavailable. Since many of the obligations were made late in FY 72, those funds were not expended before the close of the fiscal year and will be included in FY 73 expenditures.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HANDICAPPED TEACHER EDUCATION (13.451)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part D, Sections 631 and 632, P.L. 91-230; 20 U.S.C. 1401

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$87,000,000(a)	\$33,484,000	\$23,984,450(b)

Program Objectives and Operations:

To improve the quality and increase the supply of educational personnel trained to work with handicapped children. Grants are awarded to assist in developing and improving training programs for educational personnel for the handicapped.

Grants may be used for undergraduate traineeships, graduate fellowships, summer traineeships, special study institutes, program development grants, and special projects. State educational agencies are eligible for not less than \$50,000 or more than \$200,000, depending upon population factors.

Eligible Applicants:

Institutions of higher education, state educational agencies, and other non-profit public and private agencies for special projects.

Primary Beneficiaries:

Persons preparing for or engaged in work with handicapped children as a teacher, supervisor, administrator, or researcher who are capable or completing undergraduate requirements within one year at the traineeship level; holders of baccalaureate degrees studying at the master's level or beyond.

(a) Authorized for all Part D programs.

(b) This estimated amount was derived by first calculating the proportion (97.3 percent) which the Handicapped Teacher Education program was of the total obligations for all Handicapped Manpower programs and applying the percentage to the total expenditure for all manpower programs.

Available Program Data:

In the Fall of 1972, approximately 12,500 trained teachers and specialists became available to serve the additional 250,000 handicapped children entering the education system. An additional 30 new programs were established in FY 72 for priority areas of manpower needs: rural areas, predominantly black colleges, early childhood education, and career education. Programs were supported at 284 colleges and universities and 56 state education agencies. Full-time students who participated in the program consisted of 40,608 undergraduates, 12,901 master's and 1,773 post-master's students. In addition 7,588 undergraduate, 20,155 master's and 2,023 post-master's part-time students participated. Direct financial aid was given to 1,925 undergraduates, 3,563 master's, and 724 post-master's students.

Federal Evaluations/Studies:

The RMC Research Corporation has recently completed a study of this program, An Evaluation of Federal Programs to Increase the Pool of Special Education Teachers. Data were obtained by: (1) a mail survey of a sample of Special Education undergraduate and graduate students funded by the Bureau of Education for the Handicapped (BEH) in 1968-69 and a sample of students at the same institutions who were not funded by BEH; (2) a mail survey of a sample of practicing Special Education teachers; and (3) mail surveys of university Special Education departments and state education agencies.

Demographic characteristics of the Title VI D recipients were found to be representative of the students in the handicapped teacher field as a whole. Recipients at the undergraduate and master's levels were predominately female (89 percent and 85 percent respectively), while 68 percent of the post-master's recipients were male. Teacher trainees were almost exclusively white (96 percent). Student grant awards for 1968-69, as compared with Office of Education statistics on need, indicate that the recipients were overrepresented in the area of sensory disorders and underrepresented in learning disorders.

Retention rates (percent working in Special Education at the time of the survey) showed little difference among the undergraduate (77 percent), master's level (75 percent) and post-master's level (88 percent) recipients. However, only 16 percent of the latter were employed Special Education teachers, while 62 percent were administrators and teacher trainers. At the master's and undergraduate levels, 70 percent and 90 percent of the 1968-69 recipients were employed as teachers in March, 1972. There is no significant difference in the retention rates of recipients and nonrecipients; however, undergraduate recipients had a higher retention rate than nonrecipients who did not receive funds from any other source.

At least 33 percent of the recipients indicated that financial support either led them into the Special Education field or kept them in it. Exposure to Special Education was a highly influential factor in entry decisions, far more influential than financial support or any other factor. An important source of entrants into Special Education training is the existing supply of practicing teachers.

The most important single reason (about a third of the total) for leaving the field, for both recipients and nonrecipients, was found to be pregnancy and children. Unavailability of jobs was the second most frequently stated response. Few indicated dissatisfaction with the field as the reason for leaving.

The rates of obtaining degrees sought in 1968-69 by the time of the survey (March, 1972) were almost identical for male recipients and nonrecipients at the master's level (93) percent) and at the post-master's level (77 percent, 79 percent). The degree rate for females was slightly higher at the master's level for recipients (93 percent) than for nonrecipients (85 percent). The ratio of Special Education certificates per respondent at the time of the survey was greater for recipients than for nonrecipients.

In its analysis of the impact of the Teacher Training program on universities, the study found that: (1) departments with higher BEH funding ratios did not train more students than departments with lower funding ratios; (2) there was no correlation between the differences in BEH funding levels and the difference in student placement records of university departments; (3) faculty in institutions receiving BEH funds did not spend more time with Special Education students than faculty at other institutions; (4) the allocation of staff time to various staff functions did not vary with the ratio of the BEH grant to the total training budget; and (5) the allocation of BEH grants to student fellowship costs and staff salaries did not depend upon the ratio of BEH grants to total department training budgets. The data obtained do not provide a basis for determining effect of BEH grants on the scale of departmental operations compared with what that scale would have been without BEH funding. The study found that large BEH fund increases would probably not lead to proportional increases in the number of students being trained.

Analysis of the funding of state educational agencies (SEA) revealed that approximately 73 percent of the SEAs' operational budgets for Special Education was provided by BEH. An average of 36 students per SEA, or approximately 2,000 students, received financial assistance. It is estimated that BEH supported 73 percent, or 1,450 of these students. SEA workshops provided training to about [illegible],000 teachers and supervisors.

The study concluded that a continuation of funding at the levels existing at the time of the survey would be inappropriate. RMC found that the emphasis on increasing the size of the teacher pool in response to need estimates which extend beyond the demand for Special Education teachers would create unnecessary problems. The study suggested increased emphasis on strategies: to affect the size and composition of the demand for Special Education teachers; to improve the qualifications of the teacher pool; and to recruit from the existing teacher pool. RMS also suggested greater sensitivity to financial considerations in the selection of student recipients. It was further recommended that recruiting policies reflect priorities as to sex and race and the number of students in the highest need areas of learning disabilities and emotionally disturbed children.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

77, 95.

SPECIAL PROGRAMS FOR CHILDREN WITH SPECIFIC LEARNING DISABILITIES (LEARNING DISABILITIES) (13.520)

Federal Agency:

HEW: Office of Education, Bureau of Education for the Handicapped

Authorizing Legislation:

Education of the Handicapped Act, Title VI, Part G, Section 661, P.L. 91-230; 20 U.S.C. 1461

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$31,000,000	$2,250,000 (a)	$756,000 (a)

Program Objectives and Operations:

To establish and operate model centers for the improvement of education of children with specific learning disabilities, through research and training of educational personnel.

Eligible Applicants:

Public or nonprofit agencies, organizations, or institutions may receive grants. Public or private agencies, organizations, or institutions may receive contracts.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, eight projects were involved with research and training in specific learning disabilities including limited visual disabilities, motor and coordination problems, and dyslexia. Since the program operates on a forward funding basis, these projects were funded in FY 71. In FY 72, 15 additional projects were funded for a total of 23 in operation during FY 73.

The eight projects provided training for approximately 2,078 teachers, 20 teachers' aides, and 80 other personnel for a total of 2,[illegible]8 personnel during FY 72.

(a) Since funds are not designated for specific purposes, it is impossible to determine the portion of obligations and expenditures that went for training.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that there have been no evaluation studies of this program nor are any under way or planned.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

EDUCATIONAL PERSONNEL DEVELOPMENT--EDUCATIONAL LEADERSHIP (EDUCATIONAL ADMINISTRATION PROGRAM) (13.514)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000	$5,209,149	(b)

Program Objectives and Operations:

To identify, recruit, and train new talent for positions in administration; and to increase the flexibility and capability of institutions to train administrators.

Funds cover stipends, dependents' allowances, and instructional costs. There are no formula or matching requirements.

Eligible Applicants:

Institutions of higher education, state departments of education, local public educational agencies, or two or more of these agencies in combination.

Primary Beneficiaries:

Present or prospective administrators for elementary and secondary schools.

Available Program Data:

In FY 72, there were a total of 807 individuals in the program. Of these, nine were students, 219 were teacher aides or teachers, 321 were educational supervisors, and 258 were in related positions or unreported. Eighty-five percent of

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(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

(b) A discrete expenditures figure was not available for this program. Combined expenditures of five EPDA programs can be found on p. 322.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that there have been no evaluation studies of this program nor are any under way or planned.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

EDUCATIONAL PERSONNEL DEVELOPMENT--EDUCATIONAL LEADERSHIP (EDUCATIONAL ADMINISTRATION PROGRAM) (13.514)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000	$5,209,149	(b)

Program Objectives and Operations:

To identify, recruit, and train new talent for positions in administration; and to increase the flexibility and capability of institutions to train administrators.

Funds cover stipends, dependents' allowances, and instructional costs. There are no formula or matching requirements.

Eligible Applicants:

Institutions of higher education, state departments of education, local public educational agencies, or two or more of these agencies in combination.

Primary Beneficiaries:

Present or prospective administrators for elementary and secondary schools.

Available Program Data:

In FY 72, there were a total of 807 individuals in the program. Of these, nine were students, 219 were teacher aides or teachers, 321 were educational supervisors, and 258 were in related positions or unreported. Eighty-five percent of

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(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

(b) A discrete expenditures figure was not available for this program. Combined expenditures of five EPDA programs can be found on p. 322.

those in the program were receiving training as educational administrators. As a result of project training, 245 participants were expecting degrees and 130 were receiving new or added state certification. The racial/ethnic composition was 21 percent white, 35 percent black, 15 percent Spanish-speaking, 2 percent Asian and 23 percent American Indian. Four percent of the total was unreported. Males composed 75 percent of the participants and females 25 percent.

Federal Evaluations/Studies:

In FY 72, the Resource Management Corporation conducted a process evaluation of 28 projects. The study defined the major goal of the program as the recruitment of potential administrators from new and varied manpower sources and the placement of them in inner-city schools and other school systems with similar characteristics. The evaluation showed that the projects are not meeting these goals. While 60 percent of the participants are from minority groups, only 12 percent have been recruited from occupational groups outside the field of education. However, 100 percent of those recruited from fields outside education were placed in jobs. The study also discovered that 31 percent of the total projects do not assist participants in job placement.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

EDUCATIONAL PERSONNEL DEVELOPMENT--MEDIA SPECIALISTS (13.508)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$82,182,000[a]	\$1,893,409	\$3,000

Program Objectives and Operations:

To improve learning in the schools by increasing the number of specialized personnel who are qualified to assist and support teachers and administrators in the development and use of instructional media.

Funds are used for graduate study fellowships, and cover stipends, dependency allowances, cost of education allowances, and instructional costs. There are no formula or matching requirements, but applicants are encouraged to seek partial funding for the project from local and other sources.

Eligible Applicants:

Institutions of higher education, including junior and community colleges, state departments of education, and local public educational agencies, or two or more of these agencies in combination.

Primary Beneficiaries:

Individuals who are or will be directly responsible for the administration and supervision or operation of any component of an educational media program in elementary, secondary, and postsecondary vocational schools, or teacher trainers at the college and university level.

Available Program Data:

The Media Specialist Program has two major categories of operations--the Regular Program and the instructional Development Agency Program. Under the regular program, 14 awards were made in FY 72. Thirteen awards were

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(a)Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

made to institutions in support of long and short-term training for media specialists and educational technologists, and a separate award was made to the University of Maryland to support a Leadership Training Institute.

Under the Instructional Development Agency program, 28 states were granted funds in FY 72. EPDA participated in the funding of 15 of these 28 state programs. These funds provided for 169 instructional development institutes with approximately 8,600 participants.

Federal Evaluations/Studies:

As yet no formal assessment has been made of program effectiveness.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

EDUCATIONAL PERSONNEL DEVELOPMENT--PUPIL PERSONNEL SPECIALISTS (13.509)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000(a)	$3,722,067	(b)

Program Objectives and Operations:

To increase the supply of well-qualified pupil personnel specialists available to serve in schools, particularly those with a large proportion of students from low-income families, and to improve preservice and inservice training programs for such personnel.

Funds are to be used for the improvement, supervision, or training of persons who are serving or preparing to serve in elementary, secondary, or postsecondary vocational education. They cover stipends, dependency allowances, and instructional costs. There are no formula or matching requirements.

Eligible Applicants:

Institutions of higher education, state departments of education, and local public educational agencies, or two or more of these agencies in combination.

Primary Beneficiaries:

Prospective pupil personnel specialists and trainers of such specialists.

(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

(b) Expenditures figures are not available for this program. Combined expenditures of five EPDA programs, including Educational Personnel Development--Pupil Personnel Specialists, can be found in Educational Personnel Training--Special Education, p. 322.

Available Program Data:

In FY 72, a total of 665 persons were involved in the Pupil Personnel Specialists program. Of these, 110 were students, 327 were teacher aides or teachers, and 228 were persons in related positions or unreported. Of those in the program, 41 percent were receiving training as educational support personnel and 29 percent as teachers. There were 250 individuals expecting degrees as a result of project training, and 256 were receiving new or added state certification. The racial/ethnic composition was 27 percent white, 21 percent black, 24 percent Spanish-speaking, 10 percent American Indian, 2 percent Asian, and 15 percent unreported. Males composed 44 percent of the participants.

Federal Evaluations/Studies:

The Resource Management Corporation conducted a process evaluation of nine projects in FY 72 for the Office of Education. The study concluded that the program had done a good job in terms of projects achieving program objectives. Minority group members composed 73 percent of all participants, involvement of the projects in low-income communities was extensive, and training activities were comprehensive in nature. The study found weaknesses in project management and in assuring that successful project features are implemented outside the project.

No formal assessment of program effectiveness has yet been completed and no projected impact studies are being planned for this area. Some information is being gathered, however, on each project's material and interinstitutional relationships and the specific instances of change due to this program. This information will not be available until FY 74.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

EDUCATIONAL PERSONNEL DEVELOPMENT--URBAN/RURAL SCHOOL DEVELOPMENT (13.505)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Title V, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000	$8,821,574	$6,511,000

Program Objectives and Operations:

To improve the achievement, self-esteem, and options of studnets in schools which serve a high concentration of low-income families, through independent programs developed between the school and community.

With the aid of technical specialists, each school/community site is encouraged to develop and implement retraining strategies, curricular reform, and organizational innovation based upon a complete evaluation of its own educational needs. A formula for funding is part of the program design.

Eligible Applicants:

Urban and rural schools characterized by concentrations of low-income populations combined with low pupil performance and an inability to support change-oriented programs are eligible. Schools are usually recommended by the state and their program approved by local education agencies prior to receiving a grant.

Primary Beneficiaries:

School personnel, the students, and the community.

Available Program Data:

In FY 72, a total of 2,055 persons participated in the Urban/Rural School Development program. Of these, 68 were students, 1,676 were teacher aides or teachers, and 311 were other related personnel or unreported. Sixty-six percent of those in the program were receiving training to become teachers. There were 215

(a) Authorization for all of EPDA, Part D. Individual program authorization figures are unavailable.

participants expecting degrees as a result of project training, and 206 were receiving new or added state certification. The racial/ethnic composition was 43 percent white, 10 percent black, 39 percent Spanish-speaking, 1 percent American Indian, and 6 percent unreported. There were no Asians in the program. Males composed 24 percent of the participants and females 64 percent, with the remaining 12 percent unreported.

Federal Evaluations/Studies:

The Resource Management Corporation conducted a process evaluation of 13 projects in FY 72 for the Office of Education. Evidence gathered so far is thought by most investigators to indicate a positive impact from the program, especially in the affective domain.

This study's findings did reveal a few areas of concern, however, and although the program had been operating for only a year, it was thought that these should be addressed. For example, it was found that no projects out of the 13 studied had begun to plan for the phasing out of federal funds. Also, only 31 percent of the projects studied had arranged to incorporate successful project features of the school district and/or the college. This problem prompts a questioning of the influence the Urban/Rural Program is having on educational system change.

The projects do not offer extensive training programs. Only 46 percent, 38 percent, and 69 percent of them respectively, offered academic, practicum, or other training. Less than 55 percent of the participants said that their special training had caused them to do things differently.

No formal assessment of program effectiveness has yet been completed, but all projects are conducting evaluation procedures, and a report of the program's effect upon children's learning and behavior will soon be available from the Office of Education.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

EDUCATIONAL PERSONNEL TRAINING--SPECIAL EDUCATION (13.417)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000[a]	$5,651,993	$29,855,527[b]

Program Objectives and Operations:

To increase the supply of regular educational personnel who understand and can effectively deal with handicapped children in regular classrooms; to improve the trainers and the training institutions for these personnel; to provide special education training for various kinds of specialists; and to develop training projects for persons who work with handicapped children in poverty areas.

Grants may be used to supervise, train, or better qualify persons who are serving or preparing to serve in elementary, secondary or postsecondary vocational education. Funds cover stipends, dependency allowances, and instructional costs. Applicants are encouraged to seek partial funding for the project from local and other sources.

Eligible Applicants:

Institutions of higher education, state departments, and local public educational agencies.

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[a] Authorization for all EPDA Part D. Individual program authorization figures are unavailable.

[b] This figure represents the combined expenditures of five EPDA programs: Educational Personnel Training--Special Education (p.322); Educational Staff Training--School Personnel Utilization (p.324); Training of Teacher Trainers (p.331); EPDA--Pupil Personnel Specialists (p.318); EPDA--Educational Leadership (p.314). Separate program expenditure figures are unavailable.

Primary Beneficiaries:

Present or prospective regular educational personnel, including aides; teacher-trainers; and school specialists who would work with handicapped children in regular or special classes.

Available Program Data:

In FY 72, a total of 3,006 persons participated in the Special Education program. Of these, 97 were students, 2,024 were teachers' aides or teachers, and 885 were related personnel or unspecified. Sixty-five percent of those involved in the program were receiving training to become teachers. There were 552 participants expecting degrees as a result of their training, and 328 were receiving new or added state certification. Males composed 34 percent of those in the program and females 66 percent. The racial/ethnic composition of the program was 75 percent white, 14 percent black, 3 percent Spanish-speaking, and under 1 percent for both American Indian and Asian. Seven percent was unspecified. A total of 39 projects were sponsored in FY 72.

Federal Evaluations/Studies:

The Resource Management Corporation conducted a process evaluation of 39 Special Education projects in 1972 for the Office of Education. This study concluded that the major goal of the program, to train teachers to teach handicapped children in regular classroom settings, is being achieved by most of the projects studied. Both academic and practicum training are directed to this end. They emphasize identification, diagnosis, and remediation for handicapped children. Participants have cited no particular problems or areas that need improvement. Most projects have already begun self-evaluation studies, establishing their own measurable objectives. No other studies are being planned for this area, and no formal assessment of program effectiveness has yet been completed.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

EDUCATIONAL STAFF TRAINING--SCHOOL PERSONNEL UTILIZATION (SCHOOL PERSONNEL UTILIZATION PROGRAM) (13.425)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000(a)	$1,989,989	(b)

Program Objectives and Operations:

To recruit and train new personnel and to retrain experienced personnel for new roles in schools which provide promotional opportunities within the instructional process; and to develop training projects that enable schools to develop staffing plans which provide more effective instruction for children and make maximum use of the talent available in a school system and its community.

Grants may be used to supervise, train, or improve the qualifications of persons who are serving or preparing to serve in educational programs. Funds cover stipends, dependency allowances, and instructional costs. Applicants are encouraged to seek partial funding for the project from local and other sources.

Eligible Applicants:

Institutions of higher education, state departments of education, and local public educational agencies, or any of such agencies in combination.

Primary Beneficiaries:

Present or prospective educational personnel of all types who will be trained for work in elementary, secondary, or postsecondary vocational schools.

(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

(b) A discrete expenditure figure was not available for this program. Combined expenditures of five EPDA programs, including Educational Staff Training--School Personnel Utilization, can be found under Educational Personnel Training--Special Education, p. 322.

Available Program Data:

In FY 72 a total of 2,548 persons participated in the School Personnel Utilization program. Of these, 317 were students, 1,562 were teachers' aides or teachers, and 884 were in related occupations or unreported. Of those in the program, 58 percent were receiving training to become teachers. As a result of project training, 154 participants were expecting degrees, and 149 were receiving new or added state certification. The racial/ethnic composition was 74 percent white, 20 percent black, 1 percent Spanish-speaking, under 1 percent American Indian, under 1 percent Asian, and 4 percent unreported. Males composed 35 percent of the total number of participants and females 65 percent.

Federal Evaluations/Studies:

The Resource Management Corporation conducted a process evaluation of 16 Personnel Utilization projects for the Office of Education in 1972, the first year of development for the projects. At that time, the differentiated staffing approach of the program was well under way. Most of the preliminary steps had been taken, with total implementation of new staff roles and patterns and a new augmented salary structure yet to come. Funds other than those provided by the National Center for the Improvement of Educational Systems composed 50 percent of those required for project operations. Teacher anxiety and fatigue were reported as the major problems of most of the projects. The need for educational changes in all involved school systems was highlighted by the differentiated staffing model.

No formal evaluation of program effectiveness has yet been completed, but the Evaluation Training Center at Florida State University will complete a study in FY 74.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

TEACHER CORPS--OPERATIONS AND TRAINING (13.489)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part B-1, Sections 511-517A, P.L. 90-35; 20 U.S.C. 1101-1107a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$100,000,000	$37,389,000	$23,887,000

Program Objectives and Operations:

To strengthen the educational opportunities available to children in areas having concentrations of low-income families, and to encourage college and universities to broaden their programs of teacher preparation.

School districts must pay at least 10 percent of intern and team leader salaries and expenses. Both universities and school districts are strongly encouraged to make other substantial contributions in terms of staff time, waived fees, etc.

Eligible Applicants:

Accredited colleges and universities with a state-approved degree program are eligible. Local educational agencies may apply if the percentage of pupils from low-income homes in the schools to be served does not fall below the national, state, and the school district's poverty averages. Except under special arrangements for correctional projects, private schools may not be prime contractors.

Primary Beneficiaries:

College graduates or those with at least two years of college.

Available Program Data:

In FY 72, 2,409 persons participated in the Teacher Corps program. Of these, 1,249 were students, 370 were teacher aides or teachers, and 790 were related employees or unreported. Nearly 99 percent of those involved in the program were being trained as teachers. Of the participants, 2,356 were expecting degrees as a result of project training, and 2,348 were receiving new or added state certification. The racial/ethnic composition of the Teacher Corps in FY 72 was: 46 percent white, 32 percent black, 11 percent Spanish-speaking, 8 percent American Indian, and 2 percent Asian. Male participants composed 45 percent of the total and female 51 percent, with 4 percent unreported.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report notes several evaluation studies of the Teacher Corps Program. One of these was an assessment of the program by the General Accounting Office (GAO). A review was made of Teacher Corps projects at seven institutions of higher education and the respective participating local education agencies, and a questionnaire was sent to those Corps members who had completed their internships in 1968 and 1969. A total of 550 members answered the questionnaire.

The GAO concluded that the educational opportunities of low-income families had been improved at those schools where Corps members were present. The program allowed for more individualized instruction by providing regular teachers with more free time to devote to the needs of particular students. It also initiated the use of new teaching methods and expanded classroom and extracurricular activities. Some of these were continued after the Teacher Corps members had left the school, but others were discontinued owing to either a lack of interest or of funds.

It was found that a majority of the Teacher Corps interns remained in the field of education after their graduation, and that most of them took teaching positions in schools serving low-income areas.

The GAO study found that teacher preparation programs at institutions of higher education were improved through the Teacher Corps impetus. Some changes in the regular curriculum had been made at all 7 institutions studied. While most interns believed that their needs had been met by their academic programs, the total impact was weakened by the exclusion of non-Teacher Corps students from the special curriculums. Two of the seven sample institutions had not developed special courses but had basically utilized their regular teacher preparation programs. They have not yet determined the effectiveness of these courses in training Teacher Corps interns.

The Resource Management Corporation also conducted a study of the Teacher Corps for the Office of Education in FY 72. They received information from 63 projects with a total of 1,900 interns. Their major conclusion was that the projects had done a good job of operating within program guidelines but that some areas needed special attention. For example, it was believed that the academic training being provided was more flexible than had originally been desired by the program staff. A problem cited by interns was a lack of communication between groups within a project. Also, the lack of involvement in Teacher Corps projects by advisory councils and the community in general was a concern. It was thought to be unfortunate that more emphasis was placed on changes in college training programs than on changes in the school systems.

In addition, the Ford Foundation supported a study of the Teacher Corps by the National Education Association which was released in the summer of 1973. This major in-depth study of the Teacher Corps as an instrument of educational change particularly noted its success in seeking reform through a consensus-seeking process.

An analysis of the Louisville, Kentucky Cycle V Project offers further insight into program operations. Here teaching teams were established composed of one experienced, coordinating teacher (team leader), another experienced teacher (staff teacher), four Teacher Corps interns, two paraprofessionals, and student teachers when available. Approximately 100 children were instructed by each team, with apparently favorable results. For example, the proportion of elementary students with an increase of 0.7 year or more in the total reading achievement mean increased from only 17 percent in the first year of the project to 54 percent in the second year. The percentage indicating a year or more of growth advanced from 4 percent to 18 percent. Other improvements included: (1) a lowered pupil-teacher ratio through use of differentiated staffing; (2) more creativity and innovation in the schools due to the various backgrounds of Corpsmen; (3) increased special programs for children with special needs, e.g., behavior modification classes, enrichment programs, tutorial and remedial classes; (4) involvement of parents in making curriculum decisions; and many others.

A study has just been begun by the Office of Education on the impact and effectiveness of Teacher Corps. Contemporary Research Incorporated, Los Angeles, with Systems Development Corporation, Los Angeles, as subcontractor, will evaluate the program in terms of ultimate student performance. Three major dimensions will be investigated--institutional change, enhanced teaching skills and behaviors, and improved classroom learning by students.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

TEACHER TRAINING IN DEVELOPING INSTITUTIONS (TTDI) (13.507)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sec. 531-533, P.L. 90-35; 20 U.S.C. 1111-1119

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$90,000,000[a]	$4,867,998	$3,368,140

Program Objectives and Operations:

To assist predominantly minority institutions of higher education which have traditionally trained educational personnel who work in minority and high density low-income communities to meet the immediate training needs of project participants. Project activities must directly or indirectly strengthen the capacity of the developing grantee institution to train educational personnel more effectively.

Funds for TTDI are discretionary in nature and are constrained only by factors such as geographic distribution requirements and availability of funds. Grantee institutions, however, are encouraged to maximize the use of other related funds available to them.

Eligible Applicants:

All higher education institutions.

Primary Beneficiaries:

Teachers, supervisors, administrators, or college level trainers of teachers, as well as the institutions themselves.

Available Program Data:

In FY 72, 35 institutes were held during the summer (1971) with a total enrollment of 1,250 (a mean of 37 per institute). Of the participants, 58 percent taught in elementary schools, 34 percent in secondary schools, and 38 percent in prekindergarten, college, or adult teaching levels. (Some participants taught at more than one level.) A total of 79,358 pupils were taught. There were 24 percent males and 76 percent females in the program.

During the academic year, 38 institutions enrolled 1,269 individuals.

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[a] Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

Federal Evaluations/Studies:

During FY 72, the Human Affairs Research Center looked at 38 TTDI projects, conducting an overall assessment as well as a detailed analysis through site visits and observations. They also used a participant questionnaire to which a total of 580 of the 1280 summer participants responded. This was a 46 percent return. According to this study, the vast majority of these individuals showed improved skills in the preparation of teaching materials, in the ability to communicate with persons of racial groups other than their own, and in the ability to develop and implement effective teaching strategies. Employing a set of systematic criteria, the study concluded that 16 percent of the projects were significantly effective, 42 percent were very effective, and 42 percent were effective.

The Resource Management Corporation also conducted a process evaluation of 39 projects in the program. Their findings indicate that the participants are satisfied with the TTDI program. They revealed no discernible trend concerning the weakest or poorest project feature. The evaluation did note that only 30 percent of the projects have a staff member responsible for providing placement assistance to participants.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

TRAINING OF TEACHER TRAINERS (TRIPLE T PROGRAM) (13.490)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part D, Sections 531-533, P.L. 90-35; 20 U.S.C. 1111-1119 a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$82,182,000 (a)	$16,836,850	(b)

Program Objectives and Operations:

To increase the effectiveness of the nation's elementary and secondary schools by changing the systems of training educational personnel, especially those responsible for present teacher training programs. The program also seeks to provide settings in which all persons concerned with teacher training are able to participate in the formulation, direction, and evaluation of training of teacher trainers projects.

Funds cover stipends, dependency allowances, and instructional costs. Applicants are encouraged to seek partial funding for the project from local and other sources.

Eligible Applicants:

Institutions of higher education, state departments of education, and local public educational agencies, or two or more of the above types of agencies in combination may apply.

Primary Beneficiaries:

Preservice and inservice college, university, and school or state system leaders, including those in the academic disciplines whose professional responsibilities relate to the training of elementary and secondary school teachers or of those who train such teachers.

(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

(b) A discrete expenditure figure was not available for this program. Combined expenditures of five EPDA programs, including Training of Teacher Trainers, can be found in Educational Personnel Training--Special Education, p. 322.

Available Program Data:

In FY 72, a total of 3,035 persons participated in the Triple T Program. Of these, 746 were students, 1,726 were teacher aides or teachers, and 563 were employees in related positions or unreported. Sixty-six percent of the total number of participants were in training to become teachers. There were 1,233 participants expecting degrees as a result of project training, and 651 were receiving new or added state certification. The racial/ethnic composition was 63 percent white, 26 percent black, 7 percent Spanish-speaking, 1 percent American Indian, and less than 1 percent Asian. Males composed 38 percent of the participants, and 61 percent were females.

Federal Evaluations/Studies:

In FY 72, the Resource Management Corporation conducted a process evaluation for the Office of Education of 29 projects involving directly and indirectly around 10,000 persons. Administrators, faculty, and students in institutions of higher education and local and state education agencies were represented, as well as paraprofessionals and members of the community. The study reported that the Triple T Program had done a great deal toward bringing a number of groups together to improve the re-training of college teachers. The major problem facing the program was considered to be the resistance to communication between schools, community, and the institution of higher education. The Advisory Councils appeared to be working well, providing needed guidance to projects in planning and operations. The program had hoped to create a multiplier effect, but less than 50 percent of the projects had a staff member responsible for the formal dissemination of project information.

The Evaluation Research Center at the University of Virginia is conducting a full-scale process and product evaluation. It has required projects to submit documentary evidence of the success of all planned institutional outcomes and of the most important individual outcomes. A total of 692 changes, 583 institutional and 109 individual, were reported, documented by 2,556 pieces of evidence. The documents included proceedings of meetings, technical and project reports, narrative descriptions of activities, published reports in newspapers and magazines, and personal papers. The study believed that fact rather than opinion composed 89 percent of the evidence provided, and over one-half gave strong support for the stated change variable.

A formal assessment of program effectiveness will be completed early in 1974. Meanwhile, evidence of the kind described above will continue to be collected during FY 73.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT AWARDS (13.503)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part F, Section 552 enacted by Vocational Educational Amendment of 1968, Title II, Section 201, P.L. 90-35; P.L. 90-576; 20 U.S.C. 1119c et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$45,000,000(a)	$6,774,930(a)	$5,208,000(a)

Program Objectives and Operations:

To meet the needs in all states for qualified vocational education leadership personnel by making awards to experienced vocational educators for up to three years of graduate study in leadership development programs and by paying institutional allowances to approved institutions for the cost of the individual awardees' courses of study.

Institutional allowances may be used for instructional costs including tuition and nonrefundable fees and deposits. The stipends and allowances may be used for awardees' expenses while participating full time and maintaining satisfactory proficiency and for support of dependents as defined by the Internal Revenue Code. Definite matching fund percentages are not specified. However, grantee institutions and the state boards for vocational education in the states where projects are located are expected to make substantial contributions to them.

Eligible Applicants:

Applicant institutions must offer a comprehensive program in vocational education with adequate supporting services and disciplines in a school of graduate study. The program must be approved by the state board for vocational education.

(a) These are the budget figures for all of Part F, EPDA, including also Vocational Education Personnel Development--Professional Personnel Development for States, p. 335. It was not possible to separate the budget figures for these two programs.

Primary Beneficiaries:

Persons with not less than two years of vocational education experience, industrial, or military technical training; persons employed in, or reasonably assured of employment in, vocational education; persons recommended by their employers or others as having leadership potential and eligible for admission as graduate students.

Available Program Data:

In FY 72, a total of 253 persons participated in the development awards program. Of these, eight were students, 145 were teachers, and 100 were educational supervisors or employed in related positions. Of those in the program, 57 percent were receiving training as educational supervisors. All participants in the program were expecting a degree as the result of project training, and 199 were receiving new or added state certification. The racial/ethnic composition of the program was 90 percent white, 8 percent black, 1 percent Spanish-speaking, and 1 percent Asian. No American Indians participated in FY 72. Males composed 86 percent of those in the program and females 13 percent.

Federal Evalutions/Studies:

An evaluation specific to this program is in process.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

VOCATIONAL EDUCATION PERSONNEL DEVELOPMENT--PROFESSIONAL PERSONNEL DEVELOPMENT FOR STATES (13.504)

Federal Agency:

HEW: Office of Education, Bureau of Educational Personnel Development

Authorizing Legislation:

Education Professions Development Act, Part F, Sections 553-554, enacted by the Vocational Education Amendments of 1968, Title II, Section 201, P.L. 90-35, P.L. 90-576, 20 U.S.C. 1119c et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	(a)

Program Objectives and Operations:

To strengthen education programs authorized by the Vocational Educational Amendments of 1968, to improve the instruction and administration of vocational education at all levels, and to familiarize teachers with new curriculum materials.

Funds are to be used for vocational education, to pay the costs of cooperative arrangements with institutions of higher education, local education agencies, other educational institutions, private business or industry, or commercial enterprises. Definite matching percentages are not specified, but grantee states are expected to maximize the utilization of other funds for vocational education professional personnel development. These funds may only supplement and in no case supplant existing funds and funding activities within the state.

Eligible Applicants:

State boards for vocational education as defined in the Vocational Education Act of 1963.

Primary Beneficiaries:

Professional personnel in the field of vocational education.

(a) Individual budget figures are not available for this program. Authorization, obligation, and expenditure figures for all of Part F, EPDA, including Vocational Education Personnel Development Awards as well as this program, may be found in the description of the Development Awards, p. 333.

Available Program Data:

In FY 72, a total of 7,793 persons participated in the program. Of these, 37 were students, 4,810 were teacher aides or teachers, 2,359 were educational supervisors or support personnel, and 587 were other related employees or not reported. Of these participants, 61 percent were receiving training to become teachers. There were 347 participants expecting degrees as a result of project training, and 1,962 were receiving new or added state certification. Reported racial/ethnic composition was 46 percent white, 9 percent black, less than 1 percent Spanish-speaking, 1 percent American Indian, and less than 1 percent Asian. Approximately forty-four percent were unreported. Males composed 39 percent of those in the program, females 21 percent, and 40 percent were unreported.

Federal Evaluations/Studies:

The Professional Personnel Development for States program has undergone no specific evaluation studies. An assessment of the effect of funds for the 14 states entering the program in 1970 is now in process.

In addition to this, the Annual Evaluation Report of the Office of Education (OE) points out two problems:

1. It is desired that outside sources should provide a good share of the necessary funds, but in an FY 72 study, only 41 percent of the projects utilized any non-OE funds at all.

2. The program places emphasis on the development of sensitivity to low-income and handicapped children, but only 56 and 37 percent, respectively, of the 51 projects studied by OE focus on either area as a program goal.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

COLLEGE TEACHER GRADUATE FELLOWSHIPS (NDEA FELLOWSHIP PROGRAM) (13.407)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

National Defense Education Act of 1950, P.L. 85-864, as amended; 20 U.S.C. 462

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$26,910,000	$26,910,000	$53,782,000

Program Objectives and Operations:

To provide three-year fellowship support for graduate students as a means of increasing the supply of well-trained college teachers and encouraging the development of doctoral level education on a broad geographic basis. The fellowship portion must be paid to the graduate student. The cost of education allowance is available to the institution. The institution cannot charge the student tuition or fees; these charges must be taken out of the cost of education allowance. Institutions nominate students for fellowship support.

Eligible Applicants:

Institutions which award graduate degrees. Fellows who are American citizens or aliens in the process of becoming citizens.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Each fellowship is a three-year award providing a stipend of $2,400 for the first year of study, $2,600 for the second, and $2,800 for the third, with $500 per year for each dependent.(a) An educational allowance of $2,500 per year is provided to the institution for each NDEA fellow actively enrolled.

The Office of Education (OE) reports the funds budgeted for this program in FY 73 will support only continuing fellows. The program is being phased out, since there no longer appears to be a shortage of college teachers with the doctorate in a number of academic disciplines. In 1972 no new fellowships were awarded. There were 4,650 continuing fellowships; of them, 180 were special fellowships for veterans. Of the FY 72 appropriations, $48,156 was transferred to the National Science Foundation to help finance the Foundation's "Survey of Earned Doctorates."

(a) The stipend was increased to $3,000 effective September 1, 1973.

Federal Evaluation/Studies:

The Bureau of Social Science Research, Inc. made a comprehensive evaluation of the NDEA Fellowship Program. Phase I of the study, based entirely upon secondary analysis of available data of OE, the National Academy of Science Register of Earned Doctorates, and a National Opinion Research Center survey of 1961 college graduates, evaluated the first four years of the program (1959-62). Phase II was based on a questionnaire sent to the 2,983 persons who had begun their fellowships in the academic years 1960-61 and 1961-62 and to a comparison group of 1,140 non-NDEA fellows who were doctoral candidates during the same period. Satisfactory questionnaires were returned by 69.2 percent of the 1960-61 NDEA recipients, 70.4 percent of the 1961-62 fellows, and only 39.5 percent of the comparison group.

In accordance with the program objectives of developing doctoral level education on a broad geographic level, the studies indicated that participating institutions were heavily concentrated in the southeastern region of the country where graduate facilities had been weakest.

Characteristics of the respondents included: 14 percent were women; less than 2 percent were minority students. Slightly more were from lower socioeconomic backgrounds than were the comparison groups, with 23.1 percent of the NDEA fellows and 17.5 percent of the comparison group being from blue-collar families and 40.0 percent and 48.5 percent respectively from professional families. NDEA Ph.D. recipients reported a larger number of dependents than Ph.D. recipients as a whole, indicating that the dependent's allowance enables fellows to complete study even with a family.

Regarding the program objective of a high doctorate completion rate, the studies show that 61.8 percent of the 1960-61 group and 59.5 percent of the 1961-62 group earned their doctorate within seven years as compared with the national completion average of between one-third and one-fourth of Ph.D. candidates. Fewer women than men received their degrees, and students from lower socioeconomic backgrounds, who were more likely to have the motivational characteristics of clear career goals, interest in teaching and academic employment, and early commitment to a field of study, tended to complete their degrees more often. About one-fourth of the fellows resigned their fellowships before their expiration, resignations being especially high in the first year of the program. However, about 5 percent of those who resigned subsequently obtained the doctorate. NDEA fellows who completed the doctorate did so somewhat more rapidly than a similar group of non-NDEA fellows, but few obtained their degree within three or four years. An extension of the fellowship for a fourth year to students who have completed all requirements but writing the dissertation might reduce the time of completion as well as reducing the number of candidates who fail to complete their dissertation.

The studies concluded that the Fellowship Program has been "eminently successful" in encouraging doctoral candidates who are committed to teaching. Two-thirds of the 1960-61 and 1961-62 groups were engaged in college or university teaching, and of the Ph.D. recipients, three-fourths of the men and four-fifths of the women were employed by a college or university.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

85, 86, 93, 95.

CUBAN EDUCATION--STUDENT LOANS (13.409)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Migration and Refugee Assistance Act of 1962, Section 2, P.L. 87-510; 22 U.S.C. 2601

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$2,848,650	$3,206,887 (a)

Program Objectives and Operations:

To provide long-term, low-interest-bearing loans to Cuban nationals who are attending eligible institutions and are in need of funds to pursue their course of study.

The amount of loans is restricted to $1,000 per academic year and maximum of $5,000 for undergraduates. For graduates and professionals the amount is $2,500, and the maximum aggregate is $10,000.

Eligible Applicants:

Any college or university that meets the eligibility criteria for, and is participating in, the National Defense Student Loan Program.

Primary Beneficiaries:

Cuban nationals.

Available Program Data:

In FY 72, 246 institutions participated in the program, and the estimated number of students aided was 3,489 (1,452 new and 2,037 continuing). The average loan was $817 per students.

Federal Evaluations/Studies:

There have been no evaluations of this program.

(a) Includes carryover funds.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93.

EDUCATIONAL OPPORTUNITY GRANTS (EOG) (13.418)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, as amended, Title IV, Part A, Subpart 2, Sections 413A-413D, P.L. 89-329, P.L. 91-95, and P.L. 92-318

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$170,000,000 (a)	\$210,300,000	\$167,600,000

Program Objectives and Operations:

To enable students of exceptional financial need to pursue higher education by providing grant assistance for educational expenses.

The program is implemented through allocations to participating institutions which award the monies to needy students. Allotments to states are based on full-time higher education students in a state compared with the total such enrollment in the Nation. Students may receive up to \$1,000 per year. Every grant must be matched by the institution from some other aid administered by the institution including the College Work Study program and National Defense Student Loans.

Eligible Applicants:

Institutions of higher learning.

Primary Beneficiaries:

Undergraduate students with exceptional financial need.

Available Program Data:

During FY 72, 2,200 institutions participated in the EOG program with an estimated 297,300 students receiving grants. Public universities received 26.5 percent of the funds distributed; other public four-year institutions received 22.0 percent; public two-year schools received 7.4 percent; private universities, 10.0 percent; other private four-year institutions, 31.6 percent; and private two-year schools received 2.5 percent of the funds.

The average award per student was an estimated \$580. Of the students who received grants, and estimated 31.0 percent came from families with incomes of less than \$2,999; 41.7 percent, \$3,000 to \$5,999; 15.2 percent, \$6,000 to

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(a) Plus necessary funds for other than first-year awards.

$7,499; 7.9 percent, $7,500 to $8,999; and 4.2 percent, greater than $9,000. Estimated ethno-racial characteristics of EOG recipients for FY 72 were: black, 29.5 percent; American Indian, 0.6 percent; Oriental American, 1.3 percent; Spanish-surnamed, 5.6 percent; and other, 63.0 percent.

The Education Amendments of 1972 replaced the EOG program with the Basic Opportunity Grants (BOG) and Supplementary Education Opportunity Grants (SOG) programs. The maximum grant was increased from $1,000 to $1,500 by the amendments. Also, allotments to states based on the formula described above were reduced to 90 percent of the funds distributed. The remaining 10 percent is alloted according to criteria established by the Commissioner of Education.

Federal Evaluations/Studies:

An evaluation of the EOG program by the Bureau of Applied Social Research found the program to be achieving its primary goal of enabling students of exceptional financial need to obtain an education beyond high school. Nearly 10,000 students receiving EOGs during the 1969-70 academic year completed questionnaires for the study. In addition, financial aid administrators filled out basic data forms for over 10,000 EOG students. Detailed questionnaires were returned from over 1,600 of the 1,939 participating institutions. Personal interviews were conducted with financial aid administrators and students at 20 schools.

Of the students receiving EOG awards during 1969-70, 62 percent reported that they came from families with incomes under $6,000. Although nearly 39 percent stated that their families earned over $6,000 annually, these students generally received smaller EOG grants, came from families with a greater number of dependents, and were more likely to attend more expensive institutions and to live on campus. Over 32 percent of the EOG students came from racial or ethnic minority backgrounds. EOG students were found to be generally older and more likely to have grown up in rural communities than the American Council of Education's sample of college freshmen. Almost 32 percent of the EOG freshmen, compared with only 5 percent of the ACE students, reported that the head of their family was a laborer or unemployed. The vast majority of the ACE sample (86 percent) reported parental incomes over $6,000.

More than 80 percent of the public and 70 percent of the private institutions in the U.S., totaling 1,939 institutions, were participants in the EOG program when the study was begun. The recent trend is toward more two-year schools joining the program. Two-year colleges and open-door institutions make high institutional requests for EOG funds, since they serve a significant portion of the disadvantaged student population.

The majority of EOG institutions questioned reported that their 1969-70 funding allocation was inadequate to meet the financial aid needs of students on their campuses. The study found that the state allocation fund distribution formula tended to be inequitable. Schools which are predominantly black and have the largest percentage of students receiving financial aid more frequently reported insufficient EOG funding.

About half of the schools required EOG recipients to supplement their grant with loans, and the same number required that EOG students work part-time. Almost twice the proportion of black as of white students were provided with the complete federally funded financial aid package, including EOGs, College Work Study funds, and National Defense Student Loans.

Almost half of the participating institutions had established special programs to recruit low-income students by 1969-70. Schools least active in recruiting tended to be two-year colleges which already had the highest proportion of low-income students in attendance. EOG students remained in school at almost the same rate as other students.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

79, 93, 95.

HIGHER EDUCATION ACADEMIC FACILITIES CONSTRUCTION (13.458, 13.459)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Facilities Act of 1963, as amended; Title I, Section 104, P.L. 88-204, P.L. 89-329, P.L. 89-752, and P.L. 90-575

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$50,000,000	\$43,734,000	\$178,080,000 (a)

Program Objectives and Operations:

To provide grants to higher education institutions to finance the construction, rehabilitation, and improvement of undergraduate facilities.

Funds for public community colleges and public technical institutes are allotted to each state by a formula based on the number of high school graduates and per capita income of residents. Funds for other institutions are allotted to each state on a formula based on the number of students enrolled in institutions of higher education and the number of students in grades 9 through 12. Within each state, matching requirements are that federal grants may be awarded for up to 50 percent of the project development cost. Twenty-four percent of the funds appropriated are reserved for community and technical schools.

Eligible Applicants:

Public and private colleges and universities, public community colleges, and public technical institutes.

Primary Beneficiaries:

Institutions receiving funds, as well as their students.

Available Program Data:

In FY 72, 73 public community colleges received 75 grants, and 156 public and private colleges and universities received 175 grants. The federal share of the number of gross square feet to be constructed was 280,000 square feet in public community colleges and 872,000 square feet in colleges and universities.

(a) Includes carryover funds

The federal share of the number of students to be accommodated was 2,330 students in public community colleges and 5,816 students in colleges and universities. The average cost per square foot was $37.96, and the average grant per project was $141,000 for community colleges and $189,000 for public and private colleges and universities.

No grants have been made to graduate institutions since 1970.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that an evaluation of facilities need is being done by Joseph Froomkin, Inc. under contract with the Office of Education.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

HIGHER EDUCATION ACADEMIC FACILITIES CONSTRUCTION--INTEREST SUBSIDIZATION (ANNUAL INTEREST GRANT PROGRAM) (13.457)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Facilities Act of 1963, as amended, Title III, Section 306, P.L. 88-204, P.L. 90-575; 20 U.S.C. 746

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$38,750,000	$27,546,000	$ 2,104,000
	$11,100,000 (a)	$15,306,000 (a)

Program Objectives and Operations:

To provide annual interest grants to institutions of higher education and higher education building agencies to reduce the cost of borrowing from private sources for construction, rehabilitation, and improvement of academic facilities.

Institutions of higher education may receive annual interest grants which will reduce the interest cost of borrowing to 3 percent.

Eligible Applicants:

Public or private nonprofit institutions of higher education or higher education building agencies.

Primary Beneficiaries:

Institutions receiving funds as well as their students.

Available Program Data:

In FY 72, 310 grants were approved to support approximately $515,089,000 in construction loans. Of the 259 institutions that were aided by this program,

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(a) The Annual Interest Grant Program supplemented the Loans for Construction of Academic Facilities Program. In the last few years the Loan Program has not received any appropriations; however, as previously made loans are paid back small sums become available for additional loans. In FY 72, 19 loans were made to 18 institutions. Obligations for loans for FY 72 were $11,100,000 and expenditures were $15,306,000. The funds were used to construct 292,000 square feet (federal share) which will accommodate 1,858 students (federal share). The loans were targeted to black, private colleges.

69 were community colleges which received grants totaling $1,924,412 subsidizing interest on loans valued at $121 million. The average subsidized loan was $1,661,000. The federal share of the number of gross square feet constructed was 13,566,000 square feet and the federal share provided 86,416 student spaces. The program has been targeted to those institutions having the greatest need and serving the greatest number of disadvantaged students.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that an evaluation of facilities needs is being made by Joseph Froomkin, Inc. under contract to the Office of Planning, Budgeting and Evaluation of the Office of Education. According to the Report, the program has not been completely successful in its plan of targeting grants to those institutions having the greatest need and serving the greatest number of disadvantaged students. In general, colleges with the greatest need for help have poor credit ratings and are least able to avail themselves of the interest grants provided by this program. In an attempt to remedy this situation, Congress passed Section 746 of the Higher Education Amendments of 1972, which provides assistance to qualified institutions in securing loans by insuring payment of interest and principal on such loans.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

HIGHER EDUCATION ACADEMIC FACILITIES--STATE ADMINISTRATION (STATE ADMINISTRATIVE EXPENSES AND PLANNING GRANTS) (13.455)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Facilities Act of 1963, as amended, Title I, Section 105, P.L. 88-204, P.L. 89-329, P.L. 89-752, P.L. 90-575, 20 U.S.C. 715

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$7,000,000	$5,956,000	$7,221,000

Program Objectives and Operations:

To provide funds to the state commissions on higher education facilities for administering the state plans approved under Title I of the Higher Education Facilities Act and Title VI-A of the Higher Education Act of 1965.

Funds for administrative expenses as well as planning grants are allocated to states on the basis of workload. There are no matching requirements.

Eligible Applicants:

All state commissions for higher education facilities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 54 state commissions received funds for administrative expenses; the average grant per commission was $52,075. In addition, comprehensive planning grants were awarded to 53 states and territories, the average grant per commission being $59,315. Of the 98 proposals approved, 45 were Model Cities Planning Grants totaling $1,000,046. This program did not appear in the fall update of the FY 72 catalog.

Federal Evaluations/Studies:

According to the Office of Education's Annual Evaluation Report, no formal evaluation has been completed. However, a study of facilities needs is being done by Joseph Froomkin, Inc. under contract with the Office of Education.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

HIGHER EDUCATION ACT INSURED LOANS (GUARANTEED STUDENT LOAN PROGRAM) (13.460)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title IV-B, Section 421, P.L. 89-329; 20 U.S.C. 1071; Emergency Insured Student Loan Act of 1969, P.L. 91-95; 20 U.S.C. 1078a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$231,259,000	$231,259,000

Program Objectives and Operations:

Authorizes loans for educational expenses available from eligible private lenders such as banks, credit unions, savings and loan associations, pension funds, insurance companies, and schools, to undergraduate and graduate students enrolled in eligible institutions. The principal of the loan is provided by participating lending institutions. The loan is guaranteed by a state or private nonprofit agency or insured by the federal government. Loans are equally divided between those insured by states and reinsured (80 percent) by the federal government. If the student's adjusted family income is less than $15,000, the federal government will pay the total interest on the loan until repayment begins and during authorized periods of deferment. With the passage of the 1972 Education Amendments, federal interest payment regulations were changed. If the student is determined by the school (or lender) to be in need of the loan, the federal government will pay the total interest on the loan until repayment begins and during authorized periods of deferment. Other students may still borrow but must pay all interest from date of disbursement. The student pays the total interest at an annual rate of 7 percent during repayment, which begins 9-12 months after withdrawal from school. A special allowance is authorized to be paid to lenders when economic conditions impede the fulfillment of the program or the return to the lender is less than equitable.

Eligible Applicants:

At least half-time students at eligible postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Prior to the Education Amendments of 1972, the maximum loan per academic year was $1,500, with an aggregate outstanding of $7,500 per individual.

Currently, the maximum loan per academic year is $2,500, with an undergraduate maximum aggregate outstanding of $7,500. The new aggregate total for undergraduate and graduate education is $10,000.

In FY 72, 19,193 institutions were approved for lending, and 691,874 federal loans as well as 564,425 state and other loans totaling 1,256,299 loans were insured. The total estimated amount of loan approvals was $1,301,577,000 with $708,164,000 being federal and $593,413,000 being state or other loans. The amount of the average loan was $1,036. Two territories or states received reserve fund advances during 1972. The Federal Insured Program is operating in 28 states.

In FY 72, of the total obligation amount, $197,337,000 went to interest on insured loans, $476,000 went to reserve fund advances, and $30,046,000 was for the loan insurance fund. An additional $3,400,000 supported computer services.

In FY 72, 11.8 percent of the students aided were from families with income less than $2,999; 16.2 percent were from families with income between $3,000 and $5,999; 8.0 percent, $6,000 and $7,499; 9.8 percent, $7,500 to $8,999; 18.4 percent between $9,000 and $11,999; 16.3 percent, between $12,000 and $14,999, and 19.5 percent, over $15,000. The percent distribution of loans approved by ethno-racial category was 17.2 percent black; 0.7 percent American Indian; 0.8 percent Oriental American; 2.5 percent Spanish-surnamed; 73.9 percent other; and 4.9 percent unspecified.

Federal Evaluations/Studies:

A study of the Guaranteed Loan Program was completed in 1970 by Lybrand, Ross Brothers, and Montgomery. Students, lenders, state and national bankers, industry associates, state and private guarantee agencies, regulatory authorities, and officials of the Treasury Department and Office of Education were contacted and interviewed for the study.

Based on interviews with 90 participating and 30 nonparticipating lending institutions, the study found that lender participation in the program fluctuates with the constantly changing economic conditions and fund availability. Participation was found to be small in relation to other types of loans and investments, with guaranteed loans averaging only 0.8 percent of all loans and investments. Large lenders had smaller proportional participation in the program.

The percentage of student loans made to nondepositors was higher than the corresponding percentage for all other loans (11.1 percent and 3.6 percent respectively). Larger banks were less restrictive in their policies of lending to nondepositors.

In general, student loans were viewed by the lending community as being marginally profitable. Only credit unions and savings and loan associations consistently considered student loans to be profitable, while almost all of the larger lenders found student loans either marginal or nonprofitable.

Yields experienced on student loans were in the same relative range as reported yields experienced on long-term loans.

A majority of the respondents (63.5 percent) found defaults on student loans to be low, but they were expected to increase. At the time of the study, low default rates did not seem to influence attitudes of student loan profitability. Administration and collection costs were found to be excessive in relation to similar costs of other lending activities by 59 percent of the lending institutions. There was a correlation between those who found costs excessive and those who considered the loan program to be either nonprofitable or marginal. Student mobility was consistently mentioned as a major factor in excessive costs.

Most lenders stated that the guaranteed loan program did not seem to have affected their ability to serve other customer's borrowing requirements. There was an indication that the lenders who viewed student loans as being unprofitable also felt that their liquidity was being impaired by the program. In 1970, 76 percent of the respondents stated that they could handle current demand for student loans and 73 percent said they would increase their student loan investment in the future.

Characteristics of students who received loans included: 38 percent were female; 87 percent were between 18 and 24 years old. Thirty percent were from families with incomes less than $6,000; 37 percent, between $6,000 and $8,999; and 32 percent, over $9,000. First-year students received 30 percent of the loans; second-year, 24 percent; third-year, 23 percent; fourth-year, 16 percent; and fifth-year or above, 7 percent. Vocational, technical, business or trade schools received 8 percent; junior colleges, 9 percent; bachelor's degree programs, 75 percent; and graduate schools, 7 percent. Eighty-two percent of the loans were made to students who were depositors or whose families were depositors in the lending institution.

Although most state programs apply restrictions that depart from federal guidelines, they appear to have had little effect on loan accessibility. Lender-imposed restrictions are much more important in this regard. Seventeen percent of the lenders stated that they give preferential consideration to other than first-year students and 19 percent give preference to students attending degree-granting institutions. Preference to degree-granting institutions makes it more difficult for vocational students to obtain loans. Highest demand for the loans was from vocational schools, where availability of other programs is more limited. The most significant preference was in granting loans to students who are depositors (63 percent) or whose families are depositors (67 percent). Lender-imposed restrictions were found to increase with a tight money market.

Lack of student demand, better lending alternatives, and the length of commitment associated with student loans were the primary reasons given by nonlenders for nonparticipation.

A 1972 study by the Comptroller General of the United States found that some students were provided with more financial aid than they needed to meet their educational expenses. This was a result of aid being awarded to students without considering whether the students had requested or obtained loans under the Guaranteed Student Loan program. Also, financial aid officers were not provided with information on students who were receiving assistance from federal, state, and private programs administered by some of the other officers and academic departments at the institutions.

Two additional studies of the Guaranteed Loan Program were made by the Comptroller General, one published in 1970 and the other in 1972.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

10, 11, 12, 88, 93, 95.

HIGHER EDUCATION--COOPERATIVE EDUCATION (COOPERATIVE EDUCATION PROGRAM)(13.510)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title IV, Part D, P.L. 89-329, as amended by P.L. 90-575, and P.L. 92-318

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,750,000	$1,700,000	$1,841,000

Program Objectives and Operations:

To provide federal support to cooperative education programs including the planning, establishment, expansion, or carrying out of such programs in institutions of higher education. Cooperative Education programs are those which alternate periods of full-time public or private employment.

Grants are awarded to institutions on a proposal basis. Institutions are eligible to receive grants for three years. Awards can not exceed $75,000, and funds must not be used as compensation for student employment.

Eligible Applicants:

Institutions of higher education, including junior colleges, four-year undergraduate colleges, and universities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 291 institutions requested $11,000,000 and 84 institutions received grants, with an average award of $20,238. These funds enabled approximately 35,000 students to participate in the program. Predominately black institutions received 22 grants totaling $492,000, and five colleges enrolling a substantial number of Spanish-speaking and American Indian students also received awards. It is estimated that substantially increased funding will be available for this program in FY 73 ($10.75 million).

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that there are no evaluation studies and none ongoing or planned.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

HIGHER EDUCATION--LAND-GRANT COLLEGES AND UNIVERSITIES (LAND-GRANT COLLEGE ENDOWMENT) (13.453)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Morrill Act of 1862, as amended, 12 Stat. 503, 7 U.S.C. 301; Second Morrill Act of 1890, as amended, 26 Stat. 417, 7 U.S.C. 322 and 323; Bankhead Jones Act, as amended, 49 Stat. 439, P.L. 182, 7 U.S.C. 329

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$14,720,000	$12,600,000(a)	$12,600,000(a)

Program Objectives and Operations:

Grants to land-grant colleges and universities to support instruction in agriculture, mechanic arts, English, mathematics, science, economics, and specialized teacher training in agriculture, mechanic arts, and home economics.

Each state (including the District of Columbia and Puerto Rico) receives $50,000 under the Second Morrill Act.)

Each jurisdiction receives $150,000 from Bankhead Jones funds plus an additional allotment based upon population. No portion of the grants may be applied to buildings, lands, or salaries in unauthorized fields.

Eligible Applicants:

The 50 states, the District of Columbia, and Puerto Rico.

Primary Beneficiaries:

Land-grant colleges and universities.

Available Program Data:

In FY 72, 72 institutions received grants under the program. About 94 percent of the funds were used for salaries of instructors and the remainder for instructional equipment. In FY 73 a one-time appropriation of $6 million was awarded for the two newly designated land-grant colleges of Virgin Islands and Guam.

(a) Annual appropriation (Bankhead Jones Act), $10,000,000; permanent appropriation (Second Morrill Act) $2,600,000

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that there have been no formal evaluations of the program nor are any under way or planned. According to the report, the purposes of the Acts have been largely fulfilled. Land-grant colleges and universities educate about one-fifth of the students currently enrolled in all U.S. institutions of higher education and award 40 percent of the doctoral degrees.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HIGHER EDUCATION PERSONNEL DEVELOPMENT--INSTITUTES AND SHORT-TERM TRAINING (EPDA, PART E INSTITUTES) (13.461)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Education Professions Development Act of 1967, as amended, Part E, Sections 541-543, P.L. 90-35 and P.L. 90-575; 20 U.S.C. 11196

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$36,000,000[a]	$4,725,000	$4,648,000

Program Objectives and Operations:

To train personnel in higher education by providing support for institutes and short-term training programs to train persons who are serving or preparing to serve as teachers, administrators, or educational specialists in institutions of higher education. Special emphasis is directed toward the training of: staff for junior and community colleges, training of personnel from developing institutions; and training of higher education personnel to meet the needs of the increasing numbers of minority and low-income students seeking a college education. This program provides support for in-service or pre-service training of part-time or full-time training programs of up to 12 months duration. Grants to the training institution cover all direct operating costs of the training program, participant support plus indirect costs.

Eligible Applicants:

Institutions of higher education.

Primary Beneficiaries:

Persons who are serving or preparing to serve as teachers, administrators, or educational specialists in institutions of higher learning.

Available Program Data:

In FY 72, 99 institutes and short-term training programs were supported in 44 states, the District of Columbia, and Puerto Rico.

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[a] Includes EPDA Fellowship program, p. 362.

There were 38 graduate-level regular session institutes which trained about 2,666 personnel. The 61 short-term institutes and training programs trained approximately 5,104 personnel. In FY 72, most of the funds were awarded to three priority areas: (1) $2,013,662 supported programs to train junior college personnel; (2) $3,379,820 supported programs to train higher education personnel to serve minority and low-income students; and (3) $2,014,192 supported programs to train personnel of developing institutions. These allocations to priority areas are not, however, mutually exclusive. Therefore these funding amounts should not be totaled.

Federal Evaluations/Studies:

A study of the EPDA training programs was completed in February, 1973 by Abt Associates, Inc. Inforamtion was collected and developed by means of: (1) a survey of 60 randomly selected undergraduate institutions; (2) a profiling system for synthesis and organization of EPDA V-E programs; and (3) a set of case studies, reflecting new trends in higher education.

The study found that institutes varied in length from six weeks to one year and short-term training programs were usually less than four weeks. Special projects were too varied to be categorized. Characteristically, the programs: (1) averaged ten weeks in length; (2) offered no degree for participation; and (3) were external to the normal course offerings of the host institution. Institute programs exhibited considerable variations with respect to format, cost and size. They thus tended to be much more flexible than fellowships, in that institutes can more easily focus on specific training needs.

Institute programs varied from six to 300 participants, with an average of 52; funding ranged from $8,549 to $271,435, averaging $59,829. The training grant typically covered 90 percent of the expenses of the 92 institute programs examined. Ten host institutions were predominantly nonwhite and nearly 30 percent were developing institutions. Nearly 75 percent of the participants who responded to the questionnaire held graduate degrees and had professional experience in higher education prior to EPDA training. The study noted that institute programs seemed somewhat better suited than fellowship programs to help higher education professionals update or add to their skills.

Of the 1,734 participants who responded to the questionnaire, 403 (20 percent) were from minority backgrounds and 554 (32 percent) were female. Over 90 percent of the respondents intended to pursue higher education careers. The institutes in general were highly rated by participants, with the special projects being especially well received.

Institutional leaders for both the institute and fellowship programs reported the greatest need for training in human relations skills, followed by training in dealing with current special problems, people management skills, further academic studies, and information management skills. The three activities highest in demand were developing goals and operating programs, relating to people of other races and cultures, and interviewing and one-to-one work. The major emphasis was on planning and interpersonal relations rather than on research or instruction.

Further academic training was recommended for the faculty, while training in managerial and information management skills were considered most important for noninstructional personnel and department chairmen. Persons serving in positions involving broad responsibilities -- presidents, deans, department chairmen, student affairs personnel, and academic counselors -- were most often recommended for training. The study concluded that the program's emphasis on the preparation of administrators was well placed. Increased support for job counselors and other education specialists who would find human relations skills particularly valuable was suggested.

Job and personnel counseling (though not academic counseling), remedial instruction, placement services, and admissions and recruiting were cited by the presidents as high-need areas. The study concluded that a series of short-term institutes focused upon the indicated skill areas would seem to be the most effective means of meeting a large proportion of institutional training needs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

84, 93, 95.

HIGHER EDUCATION PERSONNEL FELLOWSHIPS (EPDA, PART E FELLOWSHIP PROGRAM) (13.462)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Education Professions Development Act; Part E, Section 541, P.L. 90-35; 20 U.S.C. 461-465

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$36,000,000[a]	\$4,990,000[b]	\$4,990,000[b]

Program Objectives and Operations:

To provide 1- and 2-year fellowships for graduate-level study as a means of increasing the supply of well-prepared teachers, administrators, and educational specialists in areas of critical need for junior-community colleges and 4-year colleges and universities. Each fellowship can be granted for up to 2 years. It consists of a stipend of \$2,400 for the first calendar year of study and \$2,600 for the second year. In addition to the stipend, each fellow receives \$500 for each dependent. Educational allowances of \$2,500 are provided to the institution per year for each fellow enrolled in the program.

Eligible Applicants:

Institutions of higher education.

Primary Beneficiaries:

Graduate students who intend to pursue careers in higher education.

Available Program Data:

In FY 72 there were 100 approved programs in 89 participating institutions. The total number of fellowships awarded was 912. Of these, 581 were new and 331 were continuing. Of the fellowships awarded, 668 went for the training of teachers, 118 for the training of education specialists, and 126 for the training of administrators. A significant majority (725) were awarded to train personnel to serve in junior colleges, while 187 fellowships were awarded to train personnel to serve in other institutions. The average amount of the fellowships was \$5,471 in FY 72.

(a) Includes Institute programs, p. 359.

(b) Represents obligations and expenditures for EPDA, Part E fellowships only.

Federal Evaluations/Studies:

Abt Associates, Inc., made a study of both the EPDA institute and fellowship programs. Methodology of the study is reported on p. 360.

Fellowship programs last either one or two years and usually terminate with the award of a graduate degree. The program is frequently a regular course of study within a graduate department of the host university together with supervised teaching or administrative internship and other practical experience. Since fellowships are most often at universities, and the proportion of nonwhite or developing schools is lower among universities than among 2-year and 4-year colleges, only 3 of the 1971 host institutions were predominantly nonwhite and just 6 percent were developing institutions.

Fellowship programs are better able than the institutes programs to provide pre-service training, since the graduate degree is usually a prerequisite of employment as a professional in higher education institutions. Of the fellows who responded to the questionnaire, 23 percent were members of minority groups, and 45 percent were women. Over 90 percent of the respondents indicated that they intended to pursue careers in higher education. A majority found the program to be either outstanding or very good.

Only 64 of the 300 respondents knew of the availability of V-E funds prior to a decision of which school to attend and, of these, 32 were influenced in their choice by this knowledge. Thirty of these students reported an intention to pursue a higher education career, while 22 others who were aware of V-E funds were influenced by this awareness to pursue such a career. The EPDA fellowship program also exerted some influence on the career decisions of 109 fellows who modified their career plans after learning of the funds. However, 12 of these (11 percent) no longer intended to pursue higher education careers at the close of their second year of study. Of the 273 fellows intending to follow such careers, 119 (44 percent) were influenced in some way by the fellowship program in their choice of a career. The study concluded that this indicates a "remarkable achievement" of the fellowship program.

For a discussion of the overall goals of the EPDA fellowship and institutes programs, see p. 360.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

84, 93, 95.

HIGHER EDUCATION--STRENGTHENING DEVELOPING INSTITUTIONS (TITLE III-HEA 1965) (13.454)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title III, as amended, Sections 301-306, P.L. 89-329, P.L. 89-752, P.L. 90-575; 20 U.S.C. 1051-1056

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$91,000,000	$51,850,000	$35,766,000

Program Objectives and Operations:

To assist developing colleges, qualifying within the definition of the act, in strengthening their academic, administrative, and student services programs so that they may participate adequately in the higher education community.

Funds may be received for cooperative arrangements, national teaching fellowships, and professors emeriti. Cooperative arrangements may be made between two or more developing institutions, between developing institutions and better-established institutions, or between developing institutions and other agencies with whom they can share resources. National teaching fellowships are awarded to outstanding graduate students and to junior faculty members of colleges and universities to teach at developing institutions. Professors emeriti receive support to teach and to conduct research in developing institutions.

Eligible Applicants:

A developing college or institution of higher education.

Primary Beneficiaries:

National teaching fellows, professors emeriti, and other institutional faculty members, as well as the developing institutions themselves.

Available Program Data:

Of the annual appropriation, 76 percent is allotted to 4-year colleges and universities, and 24 percent to institutions with 2-year programs. In FY 72, 226 grants were awarded to 226 institutions, and a total of 556 developing institutions were aided. There were 635 teaching fellowships, 73 professors emeriti, and 226 cooperative arrangements supported. Of the institutions aided, 95 predominantly or historically black colleges participated and received $30,994,000 or 59.7 percent of the obligation funds.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

HIGHER EDUCATION WORK-STUDY (COLLEGE WORK-STUDY) (13.463)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Originally Economic Opportunity Act of 1964, Title I, Part C, P.L. 88-452; Higher Education Act of 1965, Title IV, Part C, P.L. 89-329; P.L. 91-95, P.L. 92-318; 20 U.S.C. 1011

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$320,000,000	$272,175,000	$250,156,000

Program Objectives and Operations:

To promote the part-time employment of students, particularly students from low-income families, who need assistance to pursue courses of study at institutions of higher education. Employment may be for the institution itself (except in the case of a proprietary institution of higher education) or for public or private nonprofit organizations. Grants are made to higher education institutions for partial reimbursement of wages paid to students. The grants cover 80 percent of the student wages, with the remainder to be paid by the institution, the employer of the student, or some other donor.

Eligible Applicants:

Accredited (and certain other) institutions of higher education, including junior colleges and institutions which provide high school graduates at least a 6-month training course.

Primary Beneficiaries:

Full-time undergraduate, graduate, or professional students whose resources, including parental contributions, are determined by the grantee institution to be inadequate to enable them to study at the institution.(a)

Available Program Data:

During the 1971-72 academic year, approximately 2,500 institutions participated in the program, enabling some 545,000 students to find part-time employment.

(a) The 1972 Education Amendments eliminated the 15-hour-per-week maximum and opened the program to half-time students. It also changed the emphasis of the program from students from low-income families to students with exceptional financial need.

It is estimated that 28.3 percent of the funds were distributed to public universities; 23.6 percent went to other public four-year institutions; 15.0 percent went to public two-year schools; private universities received 8.9 percent of the funds; other four-year private institutions received 21.4 percent, and private two-year schools received 2.8 percent.

The average annual student wage amounted to an estimated $525. One measure of demand for the program, the amount of panel-approved requests from institutions participating in the program, shows that for FY 72, panels approved $305,707,000 in institutional requests, a much greater amount than was actually available for distribution to the schools.

Of the students who received CWS benefits in FY 72, an estimated 96.0 percent were undergraduates and 4.0 percent were graduate students. It is estimated that 27.4 percent of the students aided had gross family income of less than $2,999; 29.3 percent had family income of $3,000 to $5,999; 14.8 percent, $6,000 to $7,499; 11.2 percent, $7,500 to $8,999; and 17.3 percent, more than $9,000. Estimated ethno-racial characteristics of work-study recipients were: black, 20.7 percent; American Indian, 0.5 percent; Oriental-American, 1.1 percent; Spanish-surnamed, 4.0 percent; and all other, 73.7 percent.

Federal Evaluations/Studies:

A comprehensive evaluation of the College Work-Study Program was completed in 1973 by the Bureau of Applied Social Science Research. Over 8,000 students working under the CWS program during academic year 1970-71 completed questionnaires. Financial aid administrators filled out basic data forms for over 10,000 CWS students. Detailed questionnaires were also returned by 2,006 participating institutions, as well as 2,232 employers of CWS students. Personal interviews were conducted with financial aid administrators, other college officials, students, and employers at 23 colleges and universities around the country and in two summer cooperative programs.

Comparing freshmen holding CWS jobs with the American Council on Education's sample of college freshmen, the study found CWS students to be from lower-income families and almost three times as likely to be from minority backgrounds. CWS freshmen tended to be older, they were more likely to be from a rural community and to have parents with low levels of educational achievement. Fifty-five percent of the CWS students were from families with annual incomes below $6,000; over 80 percent came from families with incomes under $9,000. Students from families with incomes over $9,000 tended to be enrolled in higher-cost institutions, with a loan as a part of their financial aid package and their parents or others contributing on the average more than $850 toward college expenses. On the average, earnings from the CWS job covered 54 percent of the basic expenses of attending public colleges and 27 percent of private schools. In most instances CWS earnings were accompanied by an Educational Opportunity grant and/or a National Defense Student loan.

Almost one-third of the CWS students were the first in their families to attend college, even though they had older brothers and sisters. Nearly 20 percent said they would not have been able to go to college without CWS assistance (34 percent of the black students stated this).

Almost one-third of the participating institutions during 1970-71 were private four-year schools; 31 percent were public two-year colleges. Sixty percent of the schools reported their 1970-71 allocation was inadequate to provide employment for all eligible students.

Only one-third of the participating schools offered off-campus employment. Thirty-five percent of the CWS jobs were classified as clerical, 14 percent as librarian or museum assistants, 12 percent as teaching, research, or lab assistants, and only 7 percent security or maintenance. Students typically earned $1.74 per hour, worked 13 hours per week for total yearly earnings, (except summer) of $611.

While half the CWS students would have preferred another job, 88 percent said they were at least somewhat satisfied and 50 percent maintained they were very satisfied. Men were about twice as likely as women to hold high-ranked jobs (teaching assistant), regardless of class level, major, or grade average. Men also held more low positions (maintenance), while 50 percent of the women held clerical jobs. With few exceptions, men were paid more for similar work.

Over 80 percent of the schools said that the CWS program had enabled them to bring in more students from low-income families and to create job opportunities on campus. Almost 70 percent of the CWS administrators believed the CWS program to be very successful; over 80 percent would expand their program if additional funds were available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

78, 93, 95.

NATIONAL DEFENSE STUDENT LOANS--LOAN CONTRIBUTIONS, LOANS TO INSTITUTIONS, LOAN CANCELLATIONS (13.469, 13.470, 13.471)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

National Defense Education Act of 1958, Title II, as amended, P.L. 85-864, P.L. 92-318; 20 U.S.C. 421

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
$375,000,000	$286,000,000	contributions to loan funds	$282,715,000
	$ 1,803,000	loans to institutions	$ 1,806,000
	$ 3,890,000	cancellation of loans	$ 2,642,000

Program Objectives and Operations:

To establish loan funds at eligible higher education institutions to permit needy undergraduate and graduate students to complete their education. Grants to the institutions make up 90 percent of the new contributions to the loan fund with 10 percent contributed by the institution. The loans to institutions supplement the institutional NDSL fund whenever the participating institution cannot initially deposit, and maintain in its fund, an amount equal to at least one-ninth of the federal capital contribution. The cancellation payments reimburse institutions for their share of loans cancelled for NDSL recipients who become teachers or who perform active military service in the U.S. Armed Forces.[a]

Eligible Applicants:

Higher education institutions.

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[a] Cancellations for teachers receiving loans prior to July 1, 1972 is 10 percent for up to five years, except that persons who teach in predominantly low-income areas, or who teach handicapped children, receive 15 percent cancellation per year, for up to 100 percent of the loan. Persons who received a loan during the period after April 13, 1970, through June 30, 1972 and who served in the Armed Forces after June 30, 1970 may receive a 12 1/2 percent cancellation per year for a maximum of a 50 percent cancellation. Somewhat different provisions apply to loans made on or after July 1, 1972.

Primary Beneficiaries:

For direct loans, undergraduate and graduate students who need assistance; for loans to institutions, the institutions; for cancellations, the borrowers who receive cancellations.

Available Program Data:

In FY 72, the Office of Education estimates that 2,186 institutions received contributions to loan funds, while 372,800 first-time recipients and 241,400 continuing recipients, for a total of 614,200 students, were aided with loans. The average loan per student was $670. It is estimated that 28.2 percent of the funds distributed went to public universities, 19.5 percent went to other four-year public institutions, 4.0 percent went to two-year public schools, 17.1 percent to private universities, 28.5 percent to other four-year private institutions, and 2.7 percent to private two-year schools. The loans to institutions program aided 81 institutions in FY 72. Loan cancellations of 10 percent were received by 68,000 new borrowers and 100,000 continuing borrowers in FY 72. Over 42,000 new and 30,000 continuing borrowers received cancellations of 15 percent. The total number of borrowers who received cancellations was 240,000 in FY 72. Loan applications from institutions are about 30 percent in excess of final panel-approved amounts. Panel-approved amounts have typically exceeded actual program appropriations by about 40 percent.

Of the students aided, 93.7 percent were undergraduates and 6.3 percent were graduate students. It is estimated that 22.2 percent of the students aided were from families with gross income less than $2,999; 25.8 percent had family income of $3,000 to $5,999; 13.9 percent, $6,000 to $7,499; 12.1 percent $7,500 to $8,999; and 26 percent $9,000 or more Percentage distribution of students who received loans by ethno-racial category was: black, 16.5 percent; American Indian, 0.3 percent; Oriental American, 0.8 percent; Spanish-surnamed American, 3.2 percent; and other, 79.2 percent.

For loans made prior to July 1, 1972, undergraduates could borrow up to $1,000 a year. Graduate and professional students could borrow up to $2,500 a year. Total undergraduate indebtedness could not exceed $5,000, while the aggregate loans of a graduate or professional student could not exceed $10,000 for all years.(b) Deferments are granted when the borrower is a full-time student or for up to three years when he is serving in the U.S. Armed Forces, Peace Corps, or VISTA.

Federal Evaluations/Studies:

There are no completed evaluations of the NDSL program at this time. The following is a summary of the preliminary findings of a "National Defense Borrowers Study" conducted by Richard Tombaugh for the Division of Student

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(b) The 1972 Education Amendments increased the maximum amount that can be borrowed by undergraduates to $2,500 in the first two years and $5,000 total.

Financial Aid, Office of Education, during FY 70. Questionnaires were sent to a sample consisting of 25 percent of the undergraduate borrowers who had terminated their education through graduation, transfer, or withdrawal during FY 65 at 25 percent of the institutions which had participated in the NDSL program for the four consecutive years prior to and including 1965. This group of students was selected because of their opportunity to borrow for four years, yet be potentially out of school for five years. The return rate on the questionnaire was 72 percent.

Preliminary conclusions indicate that 77.3 percent of the sample were highly favorable or favorable in their attitude towards NDSL borrowing. There was no loss of favor as the amount borrowed increased. Less than 1 percent of the respondents held unfavorable attitudes. More favorable attitudes were held by persons who borrowed in their later years of education and had graduated from college. Professionals or teachers expressed the most satisfaction with the program, while these borrowers who were employed in clerical, sales, and blue-collar jobs showed more disfavor. Attitudes toward borrowing appear to be correlated to the borrower's perception of the quality of the university loan administration.

A large majority (87 percent) of the sample borrowed less than $2,000. Sixty-five percent did not find it necessary to borrow from other sources. Most (85 percent) completed their undergraduate education and 85 percent attended school full time. Sixty-one percent of the borrowers in the study participated in the program in their senior year. The loan program did not seem to interfere with marriage plans, as 87 percent reported to this effect. Loans affected family planning slightly more, but 74 percent stated that loan commitments did not influence their family plans.

In repayment performance, only 7 percent of the sample indicated that they were behind in payments. A high percentage of the students reported adequate loan information and billing from their institutions. Only 3 percent of the loans were being repaid by parents. The percentage of those paying on schedule and prepaying decreased as the amount of the NDSL loan increased.

About half (48 percent) of the borrowers went into teaching. Sixty-one percent said that their decision to teach was not influenced by the availability of NDSL loans, and 54 percent reported no influence by the cancellation provisions. Seventy-eight percent found the payment period adequate, and only 4 percent thought it should be extended. Most (71 percent) either approved of borrowing highly or with some reservations, and 81 percent said they would borrow at least as much if they were to undertake their education again.

A large study of the NDSL program is currently being done under contract with the Educational Testing Service, Princeton, N.J.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

78, 93, 95.

SPECIAL SERVICES FOR DISADVANTAGED STUDENTS IN INSTITUTIONS OF HIGHER EDUCATION (13.482)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Amendments of 1968, P.L. 90-575, P.L. 92-318; 20 U.S.C. 1101

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$96,000,000 (a)	$14,175,000 (b)	$14,010,000

Program Objectives and Operations:

To assist low-income and physically handicapped students initiate, continue, or resume postsecondary education.

Funds are provided for counseling, curriculum modification, tutoring, community and agency liaison, placement, faculty consultants, and other educational services.

Eligible Applicants:

Accredited institutions of higher education or combinations of such institutions.

Primary Beneficiaries:

Students enrolled or accepted for enrollment in schools receiving grants who come from disadvantaged backgrounds or are physically handicapped.

Available Program Data:

In FY 72, 420 program proposals were received, for a total of $40,123,000 requested. Two hundred and eight projects, of which 24 were new and 184 were continuing, were funded at an average cost of $68,149 per project, serving 48,700 students. The average cost per student was about $300. Based on interim reports from 174 FY 72 projects, the percentage distribution of students aided, by gross family income, was: 35.9 percent in the under $2,999 category; 39.8 percent, $3,000 to $5,999; 12,8 percent, $6,000 to $7,499; 5.7 percent $7,500 to $8,999; and 5.8 percent, $9,000 or more. Blacks received 56 percent of the services, while American Indians received 6.1 percent, Oriental Americans 1.2 percent, Spanish-surmamed 16.9 percent, white and other ethnoracial groups, 19.8 percent.

(a) This is the authorization for Special Services for Disadvantaged Students (p. 372), Talent Search (p. 374), and Upward Bound (p. 378).

(b) In addition, $825,000 of the appropriation was set aside for the Right to Read program.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation on Education Programs states that there are no completed evaluations at this time. The southeastern office of Educational Testing Service, Durham, North Carolina, is conducting an evaluation study which is scheduled to be completed in the Fall of 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

TALENT SEARCH (13.488)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title IV-A, P.L. 89-329, P.L. 90-575; P.L. 92-318; 20 U.S.C. 1101

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$96,000,000[a]	$5,000,000[b]	$4,960,000

Program Objectives and Operations:

To identify qualified youths of financial or cultural need with an exceptional potential for postsecondary education, encourage them to complete secondary school and undertake postsecondary training. Talent Search projects also publicize existing forms of financial aid. Grants are limited to $100,000 per year.

Eligible Applicants:

Institutions of higher education, public and private nonprofit agencies, and other public and private agencies and organizations.

Primary Beneficiaries:

All young people in grade 7 and above who are in financial or cultural need and have an exceptional potential for postsecondary education, including high school and college dropouts.

Available Program Data:

In FY 72, 204 proposals requesting $14,694,000 were submitted for Talent Search programs. In that year, 104 projects with an average award of $48,077 were funded. Of these, 20 were new and 84 were continuing. On the basis of interim data, it is estimated that 125,000 students were aided. Percentage distribution of students by family income was: nearly 34.0 percent, under $2,999; 38.9 percent, $3,000 to $5,999; 14.2 percent, $6,000 to $7,499, 6.9 percent, $7,500 to $8,999, and 6.0 percent, $9,000 and above. The largest proportion of assistance went to blacks (53.8 percent), followed by Spanish-surnamed Americans (19.1 percent), American Indians (8.4 percent), Oriental Americans (0.9 percent), and whites and others (17.8 percent). In addition, 62 Veterans Talent Search projects funded in FY 72 at an average grant of $16,129, served 22,531 veterans.

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[a] This is the authorization for Special Services for Disadvantaged Students (p. 372), Talent Search (p. 374), and Upward Bound (p. 378).

[b] An additional $1,000,000 supplemental appropriation was made for veterans programs.

Federal Evaluations/Studies:

According to The Office of Education's Annual Evaluation Report, there are no completed evaluations at this time. An evaluation was begun in FY 73.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

UNIVERSITY COMMUNITY SERVICE--GRANTS TO STATES FOR COMMUNITY SERVICE AND CONTINUING EDUCATION PROGRAMS (13.491)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title 1, P.L. 89-329, amended by P.L. 90-575 and P.L. 92-318; 20 U.S.C. 1001, 1003, 1005, 1006, 1221, 1222

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$9,475,000	$9,472,000

Program Objectives and Operations:

To encourage colleges and universities to assist in the solution of community problems by strengthening those community service and continuing education programs that are designed to provide communities with problem-solving assistance and to strengthen existing mechanisms or create new ones.

Funds are provided on a two-thirds federal and one-third nonfederal matching basis. A basic amount of $100,000 is provided 50 states and the District of Columbia ($25,000 to American Samoa, Guam, Puerto Rico, and the Virgin Islands), and the balance is distributed on the basis of the total resident population. The Commissioner is authorized to reserve up to 10 percent of the appropriation for grants and contracts covering up to 90 percent of the cost of special programs and projects designed to seek solutions to national and regional problems of technological change and environmental pollution.

Eligible Applicants:

Institutions of higher education.

Primary Beneficiaries:

Adults who have completed their formal education or had their educations interrupted; institutions of higher education; the community.

Available Program Data:

More than 317,000 adults participated in the 576 community service and continuing education projects completed during FY 72. The projects were staffed by 3,051 faculty members, many devoting more than half of their time to the activity. Over 11,000 undergraduate and graduate students, working as technical assistants, interns, and researchers, served as resource personnel. One hundred twenty-four off-campus learning centers enabled many adults to continue their education at convenient times and locations. Institutional participation reached a new high as 572 colleges and universities became involved in community education projects supported by Title 1. As of June 30, 1972, 1,074 institutions of higher education, 40 percent of those eligible, had participated in the community service and continuing education program since its inception in FY 66.

Federal Evaluations/Studies:

The Higher Education Amendments of 1972 require the National Advisory Council on Extension and Continuing Education to review Title 1 programs carried out prior to July 1, 1973. This review is to be completed by March 31, 1975.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

93, 95.

UPWARD BOUND (13.492)

Federal Agency:

HEW: Office of Education, Bureau of Higher Education

Authorizing Legislation:

Higher Education Act of 1965, Title IV-A, Section 408, P.L. 89-329, P.L. 90-575, P.L. 91-230, P.L. 92-318

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$96,000,000(a)	$29,599,000(b)	$24,993,000

Program Objectives and Operations:

To generate the skill and motivation necessary for success in education beyond high school among young people from low-income families and with inadequate secondary preparation.

Funds are awarded to academic institutions to operate Upward Bound projects. The federal cost may not exceed an annual rate of $1,440 per student.

Eligible Applicants:

Institutions of higher education and, in exceptional cases, a secondary school or postsecondary school if it is better able to provide the requested services.

Primary Beneficiaries:

Students who meet income criteria and are characterized as academic risks for college education because of lack of educational preparation and/or underachievement in high school.

Available Program Data:

In FY 72, $40,789,000 was requested by institutions for program funding. Of the 431 proposals received, 316 projects (25 new and 291 continuing) were funded, aiding 24,786 students. Percentage distribution of students by family income was: 31.8 percent, under $2,999; 52.0 percent, $3,000 to $5,999; 11.4 percent, $6,000 to $7,499; 3.2 percent, $7,500 to $8,999; 1.6

(a) This is the authorization for Special Services for Disadvantaged Students (p. 372), Talent Search (p. 374), and Upward Bound (p. 378).

(b) A special supplemental appropriation of $4,000,000 was made for veterans' projects. In addition, $1,400,000 was set aside for the Right to Read Program.

percent, $9,000 and over. A majority of the students aided were black (59.5 percent), 5.4 percent were American Indian, 0.7 percent were Oriental Americans, 11.1 percent were Spanish-surnamed Americans, 20.9 percent were white, and 2.4 percent were from other racial and ethnic groups. In addition, 62 Veterans Upward Bound projects were funded.

Federal Evaluations/Studies:

Evaluation studies and articles on the Upward Bound program include: (1) Greenleigh Associates, Inc., Upward Bound 1965-1969: A History and Synthesis of Data on the Program in the Office of Economic Opportunity, (2) David E. Hunt and Robert H. Hardt, National Profile of 1967 Upward Bound Students, (3) Research Management Corporation, Evaluations of the War on Poverty, and (4) articles in Journal of Human Resources, Spring 1971 and Winter 1973. A new, more comprehensive evaluation was begun in 1973.

The Office of Education's Annual Evaluation Report states that an analysis of recent census data reveals that there are about 1,800,000 students in the tenth to twelfth grades from families with incomes less than $5,000. These students constitute the upper limit of the Upward Bound target population. In contrast to the national norm of about 60 percent of all high school graduates eventually entering college, about 40 percent of the high school graduates from low-income families who were 18 to 24 years old in 1970 had entered college by October, 1970. The Upward Bound program is directed toward encouraging an additional 20 percent of low-income students (360,000 students) to attend college. Actual enrollment in college of Upward Bound high school graduates averaged almost 70 percent for the years 1965-1971, exceeding the national mean.

The Greenleigh evaluation found: (1) Upward Bound students are generally representative of the academically underachieving and economically disadvantaged youth in America; (2) the Upward Bound program is an effective dropout-prevention program as well as a channel to college; and (3) college retention rates of Upward Bound graduates are equal to or greater than the national average.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

9, 19, 20, 21, 22, 34, 93, 95.

COLLEGE LIBRARY RESOURCES (H.E.A.-TITLE II-A) (13.406)

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Higher Education Act of 1965, Title II-A, as amended, Sections 201 to 208, 1201 to 1204, P.L. 89-329, P.L. 90-575; 20 U.S.C. 1021-1028, 1141-1144

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$90,000,000	$10,993,000	$3,913,000

Program Objectives and Operations:

To assist and encourage institutions of higher education in the acquisition of library materials.

Grants are of three types: (1) basic grants up to $5,000 with 100 percent matching; (2) supplemental grants (increased from $10 to $20 per student beginning in FY 73) with no matching, to institutions eligible to receive basic grants; and (3) special purpose grants with 1/3 matching, with the total amount not to exceed 15 percent of the program appropriation.

Eligible Applicants:

Institutions of higher learning.

Primary Beneficiaries:

Students attending institutions receiving grants.

Available Program Data:

Beginning in 1971, the funds were redirected through revision of the guidelines to support developing and new institutions such as community colleges, vocational technical institutions, institutions with high incidence of low-income students, and institutions sharing their resources with schools with more limited collections. Due to this redirection, the number of grants was decreased from 2,000 in FY 70 to 1,056 in FY 72. Of the latter, 504 were basic and 494 were supplemental grants. An additional 58 special purpose grants provided support to institutions with programs which share their resources with needy institutions. Included in these grants are 95 directed toward predominantly black colleges and universities, totaling nearly $1.9 million in obligations. Effective in FY 73 the program thrust was again redirected so that all basic grants must be funded before supplemental grants.

Federal Evaluations/Studies:

According to the FY 72 annual evaluation report of education programs issued by the Office Education, there are no ongoing evaluation studies directly related to this program nor are any planned. The report for FY 72 states that reports from the field and staff visits suggest that the redirection of supplying funds to community colleges, vocational technical institutes, and especially those institutes with high incidence of low-income students has made a significant impact on improving library resources for these institutions.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

CONSTRUCTION OF PUBLIC LIBRARIES (LSCA TITLE II) (13.408)[a]

Federal Agency:

HEW: Office of Education

Authorizing Legislation:

Library Services and Construction Act, as amended, Sections 101-103, P.L. 91-600; 20 U.S.C. 351-355e-2

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$80,000,000	$9,533,066	$7,184,000

Program Objectives and Operations:

To aid states in construction of public libraries to serve areas without library service facilities.

Funds are provided to states on a matching basis with the federal share ranging from 33 percent to 66 percent, determined by the per capita wealth of the states; Trust Territories receive 100 percent federal share. Funds may be used for the construction of new buildings, for additions to existing buildings and for renovation or alteration, or for acquisition of existing buildings for use as public libraries.

Eligible Applicants:

State library extension agencies.

Primary Beneficiaries:

Population in localities which have no library facilities or inadequate facilities.

Available Program Data:

From the program's inception in 1965 through 1972, 1,810 projects totaling $157,070,000 have been supported, adding more than 20 million square feet of floor space. In FY 72, 131 construction projects were supported, adding about 1.2 million square feet of new or renovated public library floor space.

Federal Evaluation/Studies:

The Office of Education's Annual Evaluation Report of Education Programs, Fiscal Year 1972 states that an evaluation study is being conducted by the System Development Corporation and is expected to be completed in the Fall of 1973.

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[a] While not directly benefiting postsecondary education, this program is included in recognition of its indirect benefits for education.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

HIGHER EDUCATION INSTRUCTIONAL EQUIPMENT (INSTRUCTIONAL EQUIPMENT) (13.518)

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Higher Educational Act of 1965, Title VIA, P.L. 89-329, as amended by P.L. 89-752, and P.L. 90-575; 20 U.S.C. 1121

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$60,000,000	$12,480,000	$5,684,000

Program Objectives and Operations:

To improve the quality of undergraduate instruction in institutions of higher education by providing financial assistance on a matching basis for the acquisition of instructional equipment, materials, and related minor remodeling.

Funds are allocated to the states by a formula based on higher education enrollment and per capita income. The federal share does not exceed 50 percent of the total project cost except in hardship cases. Grants may be used for all types of instructional equipment, including closed-circuit television equipment with the exception of general library acquisition, large-scale computers, general-purpose furniture, glassware, chemicals, textbooks, radio and television broadcast equipment, and recreational equipment.

Eligible Applicants:

Public or nonprofit institutions of higher education, including trade and vocational schools, or combinations of such institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Over one-third of the 1,107 grants awarded in FY 72 were made to postsecondary vocational schools and community colleges. State or public institutions received 745 grants, and private institutions received 362 awards. There were 222 grants made for closed-circuit TV installations under this program.

Federal Evaluations/Studies:

A formal evaluation of this program has not been conducted and there are no ongoing evaluation studies or any planned for the near future.

However, the Office of Education's Annual Evaluation Report indicated that reports from states, the higher educational community, and staff visits suggest that the program has helped improve undergraduate instructional programs. Usually the program funds are commingled with an institution's direct operating budget in order to provide continued acquisition of basic equipment and material.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

94, 95.

LIBRARY SERVICES--GRANTS FOR PUBLIC LIBRARIES (LSCA-TITLE I) (13.464)[a]

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Library Services and Construction Act, as amended, Sections 101 to 303
P.L. 91-600; 20 U.S.C. 351-355e-2

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$112,000,000	$46,569,000	$44,284,000

Program Objectives and Operations:

To assist in: (1) extending public library services to areas without service or with inadequate service; (2) establishing and extending state institutional library services and library services to the physically handicapped; (3) establishing and expanding library services to the disadvantaged in urban and rural areas; and (4) strengthening metropolitan public libraries which serve as national or regional resource centers.

Funds may be used for books and other library materials, equipment, salaries, operating expenses, administration of state plans, etc. Funds may not be used for libraries such as law, medical, school, and academic, which serve a special clientele, or for construction. Federal share ranges from 33 percent to 66 percent, based on the state's per capita income; Trust Territory share is 100 percent.

Eligible Applicants:

State library extension agencies.

Primary Beneficiaries:

Population in areas which have no library service or inadequate service.

Available Program Data:

In FY 72, 87,000,000 persons had access to LSCA services. Of these, 23,500,000 were disadvantaged, about 700,000 were persons in state institutions, and 255,000 were handicapped. The number of books purchased through LSCA in FY 72 was 7,900,000. LSCA supported 65 Right-to-Read projects, 112 drug abuse projects, and 56 Environmental Education projects.

Federal Evaluations/Studies:

System Development Corporation (SDC) is presently conducting an evaluation of LSCA Title I programs which is expected to be completed by Fall, 1973. A slightly outdated study, completed in 1969, was also prepared by SDC. The major part of this study was devoted to field visits and analysis of the LSCA program in 11 states. Regional Library Service program officers and state library administrative agency personnel were interviewed and visits were made to local libraries in the 11 states.

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[a] While not directly benefiting postsecondary education, this program is included in recognition of its indirect benefits for education.

The study found that the states have employed various strategies to extend public library services to area where they are needed, including: forming library systems, attracting professional librarians, holding institutes, conducting surveys, increasing holdings and reference services, funding projects for disadvantaged persons, cooperating with schools, carrying out public relations activities, providing consultant services, providing central processing, maintaining central holdings, and forming networks. Major LSCA Title I successes were: increased financial support for existing libraries, establishment of experimental library projects to serve the disadvantaged, extension of library services to rural areas, centralized processing for public libraries, creation of library systems, development of a comprehensive state plan for library development (Ohio), creation of information networks, and establishment of a state library (Utah). Major problems found by the study were: insufficient funds, insufficient numbers of personnel, a lack of interaction with nonpublic libraries, a lack of understanding of how to provide services to library nonusers, a lack of information by the public about library services already offered, difficulties in reacting quickly to demands for large increases in services, and a lack of criteria with which to measure library performance.

A revision in the allocation formula of LSCA funds was suggested by the study, so that state and local attitudes toward public library services would be more realistically reflected. The study recommended that the Office of Education assume a more prominent national role, which would include additional research, support of new technology, encouragement of library recruitment, training, and education, the creation of interstate communication channels, and the fostering of intrastate library coordination among public and nonpublic libraries. More flexibility in state funding, increased publicity about present library services, and increased coordination between the public and nonpublic libraries of the states were suggested by the study.

A recent report by SDC stated that it was largely through the use of LSCA funds that the states developed pilot programs for disadvantaged groups. This study found that state governments generally do not fund models, prototypes, or experimental programs. In 1971, the largest category of expenditures was for state-wide library projects, which were most often incentive or support projects for county or multicounty regional library development. The next largest expenditure category was for Priorities-Special Projects, which included services for the disadvantaged. The study found little indication that these services will be supported by state and local funds or through revenue-sharing funds. Therefore, the continuation of federal support for library services was recommended by this report.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

37, 83, 95.

LIBRARY SERVICES--INTERLIBRARY COOPERATION (LSCA-TITLE III) (13.465)

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Library Services and Construction Act, as amended, Sections 101 to 303, P.L. 91-600; 20 U.S.C. 351-355e-2

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$2,625,247	$2,618,000

Program Objectives and Operations:

To provide for the systematic and effective coordination of the resources of school, public, academic, and special libraries and special information centers for improved services of a supplementary nature to the special clientele served by each type of library center. Funds are provided through formula grants with no state matching required and may be used for services and equipment necessary for the establishment and operation of systems of libraries working together to achieve maximum service to all.

Eligible Applicants:

State library extension agencies.

Primary Beneficiaries:

School, public, academic, special libraries, and special information centers.

Available Program Data:

In FY 72, 120 cooperative projects were supported, an increase of 16 over FY 71. Over 8,700 libraries were involved in these projects, an increase of approximately 1,600 over the previous year.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that participation by all classes of libraries in telecommunications or information processing systems has increased. Cooperative centers result in a lower unit cost and a reduction of staff time for each book processed. The report states that no evaluation studies have been done, are currently under way, or planned for the near future.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

LIBRARY TRAINING GRANTS (LIBRARY INSTITUTE AND FELLOWSHIP PROGRAM) (13.468)

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Higher Education Act of 1965, Title II-B, as amended, Sections 221-224, 1201-1204, P.L. 90-154; 20 U.S.C. 1031-1034(c)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$38,000,000	$1,969,000	$2,469,000

Program Objectives and Operations:

To assist institutions of higher education in training persons in the principles and practices of librarianship and information science, thereby increasing their educational opportunities.

Funds are used to provide graduate fellowships in librarianship and to conduct institutes in librarianship. Funds are used only for training and retraining. Individuals apply to institutions which are participating or plan to participate in the program.

Eligible Applicants:

institutions of higher education which have established or are planning to establish a program of library education.

Primary Beneficiaries:

Persons who are engaged in or preparing to engage in librarianship, including librarians, information scientists, and paraprofessionals.

Available Program Data:

A total of 24 short- and long-term institutes involving about 1,251 participants were funded in FY 72. Also, 20 individuals completed the third year of a three-year traineeship program, resulting in the award of a Master of Library Science degree. The fellowship program was limited to 43 continuing doctoral candidates.

In 1971 this program was redirected to provide more responsible library services to disadvantaged and minority groups by training and retraining members of these groups so that they might enter the profession as either professionals or paraprofessionals. The Office of Education reports that the fellowship program is being phased out after FY 72, when all current fellowship grantees will have completed their recent studies. However, the Education Amendments of 1972 effective July 1, 1972, require that not less than 50 percent of the funds for library training be used to support fellowships and traineeships.

Federal Evaluations/Studies:

A recent evaluation of the institute programs studied the program and participants during fiscal years 1968 and 1969. Data were collected from three principal sources: (1) Office of Education records; (2) a questionnaire mailed to a sample of participants at 1968 and 1969 institutes and another questionnaire sent to all directors of those institutes; and (3) interviews with regional Office of Education program officers and selected institute directors.

During FY 68 and FY 69, 156 institutes were funded with an estimated 4,668 participants attending. Most of the institutes (89 percent) were full-time residential programs, with 67 percent held during the summer. They varied in length from one week to one year, averaging three to eight weeks. Although classification of the institutes was difficult and not definitive, 39 percent were found to be oriented toward school libraries and 10 percent oriented toward public libraries. Subject areas emphasized were: general librarianship in 39 percent of the institutes; audiovisual materials in 27 percent; group specialty in 23 percent; and services for blacks and other minority groups in 5 percent. It should be kept in mind that this report evaluated the program prior to the 1971 redirection towards emphasis on services to disadvantaged and minority groups.

Characteristics of the 1968 and 1969 participants included these: 72 percent were female; 85 percent were white; 11 percent black; 2 percent Oriental; 1.4 percent Spanish-surmamed; and 0.2 percent American Indians. Participants were fairly evenly distributed in age groups up to 50, with somewhat fewer beyond that age. At the time of institute attendance, the participants had a mean salary of $8,575, which had risen to $10,765 as of April 1971, an increase of 25 percent. Almost all of the questionnaire respondents (96 percent) held at least a bachelor's degree; 66 percent held a master's; and 3 percent had a doctorate. Most (84) percent were employed librarians and 90 percent were employed in a library of some type.

A majority of the participants (69 percent) thought that because of their institute experience they had initiated changes in their place of employment; 57 percent indicated that they exercised greater responsibility in their positions; and 43 percent reported a salary increase. Attitude change, job satisfaction, increase in job skills, and improved job performance were reported by many of the respondents as resulting from participation in the institutes. Women and blacks generally associated positive career changes with institute attendance to a greater extent than did men or whites. However, they were less optimistic about their potential for initiating change in their place of employment. Overall, the study found the program to have had a positive impact on participating individuals and institutions.

The first four years of the fellowship program (1966/67-1969/70) were evaluated in a fairly recent study. Data were gathered from questionnaires sent to 56 of the participating Library and Information Sciences (LIS) institutions. All but one of the institutions completed the questionnaire. However, numerous "no answer" or "estimated" figures responses reduced the usefulness of the data.

Generally, 33 percent of the students considered for Title II-B program received fellowships, comprising about 8 percent of the admitted students. Rejections of the award before enrollment were low (about 5 to 8 percent) as were resignations after enrollment (2 to 4 percent). Although financial resources varied among schools, in general, with the exception of the first year of the program, Title II-B fellowships constituted half of the grants available in participating LIS institutions.

The deans reported that the most important criteria in selection for the fellowship was undergraduate grades, followed by references and graduate record exams. Academic considerations seemed to be slightly more important in the selection of II-B fellows than for other awards. Less than half (45.4 percent) of the deans reported considering the financial need of the applicants in granting the fellowship.

Most of the deans were enthusiastic about the program and felt that it allowed them to compete with other departments and other states for better students and that, as a result, the completion rates of their programs had improved considerably.

The Title II-B fellowships, mainly one-year awards, were granted primarily for study in master's programs (76.4 percent), less often in doctoral programs (16.6 percent) and post-master's programs (7 percent). The students enrolled in the master's programs were younger and had had less experience with library work than those entering the other programs. Of the students participating in the master's program, 77.7 percent were women, 85.3 percent were white, 6.6 percent were black, and almost 70 percent were under 30 years old. The recipients of the post-master's awards were again mostly women (72.8 percent) and predominantly white (85.1 percent) but were much older, with slightly more than half over 40. In contrast, doctoral fellows were predominantly men (61.9 percent) and younger, about half were in their thirties and only a third over 40.

Although, at the time of the study, nearly half of the II-B fellows had not returned to the labor market, the data from those who had returned to work indicated an increase in library employment from 51.1 percent pre-program to 86.6 percent. The greatest change occurred with master's students, among whom the proportion in library work more than doubled, rising to 91.7 percent. Among the post-master's students, about the same proportion were in library work as before, although fewer persons were working in high school or public libraries and more persons were employed in university libraries. Also, more held academic positions in colleges or universities after the program than before. The doctoral students reflected a change, mainly from library work to academic positions in colleges and universities. The greatest number of fellows (41.2 percent) were employed in university libraries, followed by public libraries (22.7 percent) and high school libraries (15.8 percent).

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

74, 82, 95.

RESEARCH AND DEVELOPMENT--LIBRARY RESEARCH AND DEMONSTRATION (GENERAL LIBRARY RESEARCH) (13.475)

Federal Agency:

HEW: Office of Education, Bureau of Libraries and Learning Resources

Authorizing Legislation:

Higher Education Act of 1965, Title II-B, P.L. 89-329, 79 Stat. 227, as amended by P.L. 90-575; Title II, 82 Stat. 1037, 20 U.S.C. 1031

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$38,000,000	$1,999,000	$1,943,000

Program Objectives and Operations:

To award grants and contracts for demonstration projects in areas of specialized services intended to improve library and information science practices and principles.

Demonstration projects include the development of new techniques, systems, and equipment for processing, storing, and distributing information and for the dissemination of information derived from such projects.

Eligible Applicants:

Institutions of higher education and other public or private agencies, institutions, and organizations of a nonprofit nature. Contracts--profit-making agencies and organizations in addition to those listed above.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The program was redirected in FY 71 to focus support on improving services to the disadvantaged. In FY 72, 30 projects were funded. Of these, five were continuations of previously awarded projects and 25 were new projects.

Federal Evaluations/Studies:

There are no evaluation studies and none ongoing or planned for the near future.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

ADULT EDUCATION--GRANTS TO STATES (13.400)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Adult Education Act, Title III, P.L. 91-230; 20 U.S.C. 1201-1213

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$225,000,000	$51,273,000	$44,196,000

Program Objectives and Operations:

To encourage establishment of adult education programs where first priority is given to instruction in speaking, reading, or writing English for adults functioning at the fifth grade level or below. Programs serving adults above the fifth and through the eighth grade level are second priority. The Act provides that special emphasis be given to adult basic education programs except where such needs can be shown to have been met in the state. Funds are distributed to states on a formula basis with a nonfederal matching requirement of at least 10 percent. Local school districts participate by submitting proposals to the state education agency.

Eligible Applicants:

Designated state educational agencies.

Primary Beneficiaries:

Adults 16 years old and over with less than 12 years of school completed or the equivalent.

Available Program Data:

Approximately 830,000 adults were enrolled in FY 72. States reported that over 100,000 enrollees had completed the eighth grade in FY 72 through the assistance of this program, with approximately 80 percent between the ages of 18 and 44 (the program's priority target group). Per student costs from federal funds averaged $75. Nearly 20 percent of the adults were enrolled in English-as-a-second-language courses during FY 71 (the last year of available data) while over 10 percent were adults institutionalized in mental hospitals, correctional, or other facilities. The 50 states, the District of Columbia, and outlying areas including Puerto Rico, the Virgin Islands, Guam, and the Trust Territory of the Pacific Islands all participate in this program.

Federal Evaluations/Studies:

In mid-1971, the Office of Education launched a longitudinal evaluation of this program. A national sample of adult basic education students was drawn (excluding students over age 44, institutionalized students, and those studying English-as-a-second-language as well as those working at high school level courses). Sampled students were first interviewed and tested during the winter of 1972 while data were also collected on the programs in which these students were enrolled. Follow-up interviews were conducted with these students in the spring of 1973 and the summer of 1973.

Over 50 percent of the sampled students had completed ninth grade or higher, although they were now enrolled in classes at the eighth grade level or below. The educational aspirations of most of these students are for a high school credential, and almost 70 percent plan to enroll for additional vocational or technical training.

Approximately 55 percent of these adults work, and about 25 percent are on welfare or public assistance. Nearly one-fourth of the students had begun the program prior to 1971, and many had been attending for several years.

The Office of Education (OE) reports that over half of the state education agencies are contracting for independent evaluations of the adult education program. Further information about the OE longitudinal study will be available in future months from the Office of Planning, Budgeting, and Evaluation.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

ADULT EDUCATION--SPECIAL PROJECTS (13.401)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Adult Education Act, Title III, Section 309(b) of P.L. 91-230; 20 U.S.C. 1201-1213

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$6,985,477	$6,087,000

Program Objectives and Operations:

To strengthen ongoing state adult basic education programs through experimentation with new teaching methods, programs, and operational systems. Projects must be innovative and involve cooperative arrangements with other programs, showing a comprehensive or coordinated approach to problems of persons with basic educational deficiencies. Matching is 10 percent of the cost of the project wherever feasible.

Eligible Applicants:

Local educational agencies or other public or private nonprofit agencies including educational television stations.

Primary Beneficiaries:

Adults 16 years old and over with less than 12 years of school completed or equivalent.

Available Program Data:

In FY 72, 59 projects were funded, of which 21 were continuations. Priorities are developed on an annual basis by the Office of Education. Examples of projects which have been replicated elsewhere include:

1. A project begun as the University of Texas-Austin to develop materials improving adult education teacher awareness and guidance counseling. Forty-four states now utilize these materials.

2. A project at Morehead State University serving Appalachia, which conducts 18 programs, enrolls nearly 5,000 adults, and has a staff of 150.

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[a] Section 304(a) provides that not less than 10 percent nor more than 20 percent of the total appropriation ($61.3 million) shall be reserved for purposes of Section 309.

The project has developed supplementary reading materials, videotape instruction, and TV- and computer-assisted instruction.

Federal Evaluations/Studies:

No evaluation studies have been undertaken on this program beyond some evaluation reports from state personnel and from some special projects.

ADULT EDUCATION--TEACHER EDUCATION (13.402)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Adult Education Act, Title III, Section 309(c), P.L. 91-230; 20 U.S.C. 1201-1211

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$2,958,000	$3,409,000

Program Objectives and Operations:

To provide training for personnel involved, or preparing to work, in adult education.

Project grants are awarded to promote and coordinate training of personnel. Matching funds are encouraged but not required. Program expansion is accomplished through state and local workshops supported by state grant funds, providing preservice and inservice staff training and development for adult education personnel.

Eligible Applicants:

Institutions of higher education, state or local educational agencies, or other appropriate public or private agencies or organizations.

Primary Beneficiaries:

Adults 16 years old and over with less than 12 years of school completed or equivalent; primarily adult education personnel who are upgrading their competencies.

Available Program Data:

In FY 71, this training program was redirected toward more regional planning and coordination of teacher education programs based on a program developed under a grant administered by the Southern Regional Education Board. FY 72 funds, therefore, concentrated on the development of similar programs in other regions of the country. Nine such projects in FY 72 required nearly $2,500,000. These projects will continue for three years, then will be continued by state and institutional funds. The remaining monies in FY 72 funded eight additional teacher training grants. All these projects were directed toward training teachers to teach paraprofessionals who in turn will provide individualized instruction to adults. They also aided development of personnel for ethnic and special population groups and provided training for elementary/secondary teachers to become adult education personnel.

(a) Section 304(a) of P.L. 91-230 provides that not less than 10 percent or more than 20 percent of the total appropriation ($61.3 million) shall be reserved for the purposes of Section 309.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that no studies of this program are ongoing or planned.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

VOCATIONAL EDUCATION: BASIC GRANTS TO STATES (13.493)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title 1, Part B, P.L. 90-576, 20 U.S.C. 1241 to 1391

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$610,311,000 (a)	$383,843,000 (a)	$370,132,642 (a) $161,044,712 (b)

Program Objectives and Operations:

To assist in conducting vocational programs for persons of all ages who desire and need education and training for career vocations.

Formula grants are made to states, which are required to set aside 15 percent for vocational education of the disadvantaged, 15 percent for postsecondary programs, and 10 percent for vocational education of the handicapped. Monies may be used for construction of area vocational education facilities. States are required to match 50/50.

Eligible Applicants:

State boards for vocational education.

Primary Beneficiaries:

Persons requiring vocational training.

Available Program Data:

In FY 72, the estimated enrollment of adults and postsecondary students in vocational programs was 3,622,907. States, required to match the federal funds 50/50, actually overmatched them, expending an average of $5.27 per dollar of federal funds. Over 785,000 disadvantaged and over 156,000 handicapped students were served under this program, although these figures include secondary level students.

(a) These funds support both elementary-secondary and postsecondary-adult education.

(b) Estimated expenditures for postsecondary-adult education only. This estimate was developed by applying the enrollment percentage for this group to the total dollar expenditures for this program.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report notes that the lack of hard data still prevents OE from answering basic questions about this program.

However, several studies both ongoing and recently completed provide additional information about vocational education generally. The National Longitudinal Survey of 1972 high school students includes a sizeable sample of vocational students who will be followed in the survey as they progress beyond high school. The first high school data tapes are now available from this survey, and the first follow-up of these students will be conducted in the fall of 1973.

The Parnes study (Center for Human Resources Research, Ohio State University and U.S. Bureau of the Census, 1966 and 1968) of experiences of out-of-school males in the 14-to-26 age group confirms that enrollees of vocational programs do benefit from vocational training and suggests that the influence of vocational education on income is more closely related to fluctuations in labor market conditions than had been previously thought. Data showed no significant differences in the earnings of former students from different high school curriculums during periods of high unemployment but showed that former vocational students earned about $400 more a year than did former academic students and about $275 more a year than former general education students in periods when unemployment rates were declining.

A case study of three cities showed that high school graduates from vocational curricula were employed 5 to 10 percentage points more during the six-year follow-up period than were graduates of the academic curriculum who did not attend college.

The Annual Evaluation Report states that the share of federal vocational education funds received by most urban school systems increased significantly between 1968 and 1971. This is probably due to the special emphasis being placed on serving disadvantaged students, who frequently are concentrated in urban areas. Boston and Detroit were exceptions to this general trend. However, in only 9 of the 43 states which reported information for 1971 was the proportion of education funds spent in urban areas equivalent to or greater than the proportion of state's population which was urban. Data from ten states indicates that the percent of spending in depressed areas corresponds generally to the percentage of population residing in those areas.

The Vocational Impact Study (U.S. Office of Education, under contract with the National Planning Association, 1972) notes that some states did not fully expend the federal set-asides for the disadvantaged and handicapped populations. However, data indicates that postsecondary programs have a high priority in most states and that generally state and local governments provide more matching funds than required by law. The most rapid growth in vocational enrollments in the past five years has taken place in the postsecondary program.

The number of area vocational schools increased from 405 in 1965 to 1,889 in 1972. During this period, slightly over $1.6 billion of federal, state, and local funds were approved for building and equipping area vocational schools.

Adult vocational education enrollments increased from 2,666,083 in 1970 to 3,066,404 in 1972. The adult students were served by 5,569 full-time and 61,673 part-time teachers in over 100 different occupational programs. Based on reports from the states, racial/ethnic breakdown are as follows: American Indian (0.8 percent), black (15.07 percent), Oriental (0.9 percent), Spanish-surnamed (6.7 percent), and other (76.7 percent).

A study of 51 proprietary and 14 nonproprietary vocational schools in four cities (U.S. Office of Education, under contract with the American Institutes for Research, 1972), in which about 7,000 students and 5,200 alumni were questioned, examined student outcomes in four occupational areas: office; health; computer; and technical operations. Findings show that 78 percent of the graduates sought training-related jobs, and 75 percent of these persons found such jobs. However, less than 20 percent of the proprietary alumni and only 13 percent of the nonproprietary alumni obtained jobs through school placement services. Most graduates indicated satisfaction with their current job status. However, about 34 percent of the proprietary and 12 percent of the nonproprietary group thought the training was definitely not worth the money.

Cost-benefit analyses indicate that the investment in vocational training was worthwhile for all occupational groups except the computer trainees in proprietary schools. Nonproprietary school graduates have a higher rating than proprietary school graduates in cost-benefit measures and in salary gain from pretraining jobs to the first job in training. However, nonproprietary alumni generally earned less before training than did proprietary graduates. Backgrounds and motivational characteristics of students in both types of schools were similar. About 30 percent of the proprietary students and 42 percent nonproprietary were members of minority ethnic groups. Accredited and chain schools surveyed were found to be no more effective in placing graduates than nonaccredited and nonchain schools.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

92, 95.

VOCATIONAL EDUCATION--CONSUMER AND HOMEMAKING (13.494)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title I, Part F, P.L. 90-576; 82 Stat. 1064-1091; 20 U.S.C. 1241 to 1391

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$50,000,000	$25,625,000(a)	$26,464,881(a) $ 5,822,273(b)

Program Objectives and Operations:

To assist states in conducting training programs in consumer and homemaking education.

Grants are allotted to states on a formula basis, with at least one-third of these monies required to be used in economically depressed areas or areas with high rates of unemployment. Required matching is 50/50 except for programs in economically depressed areas, where the federal funding share may reach 90 percent. This program is distinguished from other parts of the law, as it is not defined as vocational education for gainful employment. Occupational home economics programs are funded under Part B of the law (Basic Grants to States, p. 401).

Eligible Applicants:

State boards for vocational education.

Primary Beneficiaries:

Individuals requiring training.

Available Program Data:

With these funds, programs for youth and adults are conducted in consumer education, nutrition, child care, family relationships, and budgeting resources. Over half of the total funds for this program are concentrated in

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(a) These funds support both elementary-secondary and postsecondary-adult education.

(b) Estimated expenditures for postsecondary-adult education only. This estimate was developed by applying the enrollment percentage for this group to the total dollar expenditures for this program.

"depressed areas" as defined by the Office of Education. Total expenditures support such activities as instructional salaries and equipment, guidance and counseling, teacher education, and curriculum development. Total post-secondary and adult enrollments in the consumer and homemaking program are estimated to be 696,358, some 22 percent of the total enrollment in the program.

Federal Evaluations/Studies:

According to the Office of Education's Annual Evaluation Report, there are no ongoing or planned evaluation studies of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

92, 95.

VOCATIONAL EDUCATION--COOPERATIVE EDUCATION (13.495)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title 1, Part G, P.L. 90-576; 20 U.S.C. 1241 to 1391; 82 Stat. 1064-1091

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$75,000,000	$19,500,000 (a)	$19,948,690 (a) $ 2,990,308 (b)

Program Objectives and Operations:

To assist the states in conducting programs of vocational education designed to prepare students for employment through cooperative work-study arrangements.

Program funds may be used for financial assistance for personnel to coordinate programs, to provide instruction, to reimburse employers for certain costs, and to pay costs for certain student services.

Eligible Applicants:

State boards for vocational education.

Primary Beneficiaries:

Students requiring vocational training.

Available Program Data:

Cooperative Education programs have increased the number of occupations for which training can be offered. Examples include marketing and distribution, business and office, trade and industrial, and health occupations. In FY 72, there were 4,194 teachers in vocational education programs as a result of Part G funding. Of these, 372 were full-time postsecondary teachers and 323 were part-time. Total enrollment under Cooperative Education projects was 118,924, of which 17,821 were postsecondary students. This shows a large expansion in enrollment over FY 70 and 71.

(a) These funds support both elementary-secondary and postsecondary-adult education.

(b) Estimated expenditures for postsecondary-adult education only. This estimate was developed by applying the enrollment percentage for this group to the total dollar expenditures for this program.

Federal Evaluations/Studies:

An ongoing study sponsored by the Office of Education will soon be completed. It utilizes 12 schools in Minnesota, North Carolina, and Ohio which offer both cooperative and noncooperative vocational education programs to: (1) identify types of cooperative vocational education programs being conducted; (2) compare the costs of vocational education programs with and without a cooperative component; and (3) determine if possible the effectiveness of the programs and the extent to which target populations are served.

A second study, *An Assessment of School-Supervised Work Education Programs*, was done for the Office of Education by System Development Corporation. Programs studied included cooperative education, dropout preventions (work study), and career exploration. This study of 50 school-supervised work education programs reports that cooperative education programs appear to be generating the most enthusiasm among students, employers, and school officials because they are meeting the expressed needs and objectives of all three groups. Students feel that cooperative education programs are providing them with valuable job training. Employers feel that they are getting their money's worth out of their student workers and are contributing to their education. School administrators and teachers are satisfied with the learning and job placements after the training period resulting from these programs.

The education level of a program (secondary or postsecondary) was examined in relation to specific occupational training programs and dropout prevention programs. In examining specific occupational training programs, it was found that postsecondary programs are more effective than secondary programs in performing nearly all aspects of program operation. They had higher ratings on job-related instructions, student followup, job-related placements, helping students to decide on an occupation, and providing students with jobs that fit into their career plans, have high responsibility ratings, and give students high satisfaction. The two areas where postsecondary programs scored lower than secondary programs were employer satisfaction with the students and student pay. Employers rated secondary students higher than their postsecondary counterparts and secondary students reported earnings slightly more than postsecondary students.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

73, 92, 95.

VOCATIONAL EDUCATION--CURRICULUM DEVELOPMENT (13.496)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title 1, Part 1, P.L. 90-576; 20 U.S.C. 1241 to 1391; 82 Stat. 1064-1091

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$3,981,000(a)	$2,107,000(a)

Program Objectives and Operations:

To provide assistance to state and local educational agencies in the development of curriculums for new occupations. Evaluation of curriculum materials and their uses as well as training of personnel in curriculum development are also carried out. Grants and contracts are made under this program with no matching funds required.

Eligible Applicants:

State educational agencies.

Primary Beneficiaries:

Colleges, universities, state boards, local boards, public or nonprofit agencies, institutions, and organizations.

Available Program Data:

A total of 58 projects were active under this program in FY 72, 18 of which were completed in that fiscal year and the remainder which were continuations. Projects were funded in the following areas: (1) bases for curriculum development; (2) surveys of occupational education curriculum materials; (3) coordination of states' efforts; (4) development of vocational instructional materials; (5) dissemination; and (6) personnel training in curriculum development and use. Approximately 20 of these projects focused on postsecondary education. An estimated 50 percent of the projects were funded at colleges and universities, regardless of the educational level of project focus.

(a) Includes some funds for secondary education which cannot be separated.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that there are no ongoing or planned evaluation studies of this program. The program officials note that all FY 72 curriculum development projects have an evaluation component.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

VOCATIONAL EDUCATION--INNOVATION (EXEMPLARY PROGRAMS AND PROJECTS) (13.502)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title I, Part D, P.L. 90-576; 20 U.S.C. 1241 to 1391; 82 Stat. 1064-1091

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$75,000,000	$16,234,000	$13,777,000

Program Objectives and Operations:

To develop, establish, and operate occupational education programs as models, with special emphasis on programs for youths with academic, socioeconomic, or other handicaps.

Funds are allotted to states through formula grants and to eligible applicants through project grants and contracts. Fifty percent of each state's allotment is reserved to the Commissioner of Education for project grants and contracts. No matching is required for either part of this program.

Eligible Applicants:

Formula grants: state boards for vocational education. Project grants: state boards, local educational agencies, or other public or nonprofit private agencies, organizations, or institutions.

Primary Beneficiaries:

Students enrolled in grades K through 12 and in junior and community colleges, and high school dropouts.

Available Program Data:

Fifty percent of each state's allotment under this program is for use by the state board for vocational education. These state-administered funds can be grants or contracts with local educational agencies, colleges and universities, and other public and private agencies and organizations. Funds obligated under the legislation are available for expenditure during the fiscal year in which they are received and also in the succeeding fiscal year. Of the estimated 372 individual state projects receiving FY 72 funds, approximately 86 were located at postsecondary institutions. These figures are somewhat misleading, however, in that some states make numerous small awards (New Mexico made 34 awards in FY 72, nine of which were at postsecondary institutions) while other states make few grants of larger amounts (Florida made only one grant in FY 72 to its State Department of Education). Projects focus on a variety of topics, including such activities as career exploration, development of marketing technology program, and vocational guidance services.

The other 50 percent of the funds for this program are reserved by the Commissioner of Education for discretionary project grants or contracts within each state. These funds are available until expended. There were three projects active in FY 72 where the grantee was a postsecondary institution or agency and the project focus included postsecondary education (San Mateo, Calif. Junior College District, Aims College, Colo., and the Wisconsin Voc-Tech. Adult Education District II). Eastern Kentucky College sponsored an exemplary project which dealt with secondary education, while two projects (Minnesota and Oregon) had at least part of their focus on postsecondary education although the project itself was not located at a postsecondary institution. The funds for all the federally administered projects (appropriated in FY 70, 71, and 72) supported the first three-year cycle of projects, with a typical project funded at a level of about $130,000 per year for the three-year period. FY 73 funds are being used to support a new three-year cycle.

Federal Evaluation/Studies:

No third-party evaluations have been completed, since most of the projects funded under Part D are in their third year and data relating to their impact are incomplete. The Annual Evaluation Report of the Office of Education notes that an assessment of this program is planned.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

90, 91, 95.

VOCATIONAL EDUCATION--RESEARCH (13.498)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title I, Part C, P.L. 90-576; 20 U.S.C. 1241 to 1391

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$67,000,000	$18,000,000 (a)	$17,249,000 (a)

Program Objectives and Operations:

To provide research, training, and experimental, developmental, or pilot programs designed to meet special vocational needs of youths, particularly those with academic, socioeconomic, and other handicaps. Fifty percent of these funds are allotted to states on a formula grant basis with matching requirements of up to 75 percent of the cost of Research Coordinating Units (RCU's) and 90 percent for other projects. The other 50 percent of the funds are reserved for the Commissioner of Education and are used for project grants. There are no matching requirements for these funds, which are allotted on a state basis.

Eligible Applicants:

Formula grants: State boards for vocational education.
Project grants: Institutions of higher education, public and private agencies, state boards, and (with State board approval), local educational agencies.

Primary Beneficiaries:

Disadvantaged youth and others.

Available Program Data:

In FY 72, approximately 25 percent of the state-administered formula grant funds were used for maintenance of the RCU's, the officially designated unit located in the state department of education or in a state university which administers the State's vocational research programs. The remaining state funds in FY 72 were used, according to state reports, to support approximately 220 grants and contracts. Priority areas for these funds included career education, problems of disadvantaged students, and cost-benefit analysis of programs and services, among others.

(a) Only a portion of these funds are obligated or expended through postsecondary institutions or are utilized for research in the area of postsecondary education. Breakdowns of the data by educational level are unavailable.

The project grant funds administered by the Office of Education (OE) in FY 72 were concentrated on the area of career education. The funds were awarded to the states on a population basis to enable each state to establish a demonstration, testing, and development site for career education model programs.

Federal Evaluations/Studies:

According to OE's Annual Evaluation Report, each project funded by project grant funds from OE was required to have an independent evaluation by a third-party agency in FY 72, but this requirement is not expected to apply in FY 74. State-sponsored research and the state RCU's are evaluated by each State Advisory Council for Vocational Education. Some states have also contracted for special in-depth evaluations. Two examples of these studies are:

1. Composite Evaluation Report for Occupational Education in the State of Illinois, Fiscal Year 1972 (Division of Vocational-Technical Education, Illinois)

2. An Assessment of the Impact of Vocational Education Research and Related Projects on Educational Practice in Pennsylvania Since 1966 (American Management Center, Inc.)

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

VOCATIONAL EDUCATION--SPECIAL NEEDS (13.499)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title 1, Section 102(b), P.L. 90-576; 20 U.S.C. 1241-1391; 82 Stat. 1064-1091

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$60,000,000	$20,000,000(a)	$20,974,081(a) $ 7,236,057(b)

Program Objectives and Operations:

To provide vocational education programs for persons having academic, socioeconomic, or other social handicaps that prevent them from succeeding in regular vocational education programs. The program is not for those with physical or mental handicaps.

Funds are allotted to states on a formula basis, with no matching required.

Eligible Applicants:

State boards for vocational education.

Primary Beneficiaries:

Disadvantaged individuals.

Available Program Data:

In FY 72, approximately 65,900 adults and postsecondary students were enrolled in this program around the country. Special services provided all enrollees included specially trained teachers in remedial and bilingual specialities, additional counseling services, accessible facilities, and instructional equipment and materials. Rural depressed communities, areas of low-cost housing in inner cities, correctional institutions, and off-reservation locations with a predominance of American Indians were some of the areas receiving funds from this program.

(a) These funds support both elementary-secondary and postsecondary-adult education.

(b) Estimated expenditures for postsecondary-adult education only. This estimate was developed by applying the enrollment percentage for this group to the total dollar expenditures for this program.

Federal Evaluations/Studies:

While there have been no specific evaluation studies directly analyzing this program, the Vocational Impact Study, described under the Basic Grants to States program (p. 401) provides additional information concerning the extent to which disadvantaged students are served.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

VOCATIONAL EDUCATION--WORK STUDY (13.501)

Federal Agency:

HEW: Office of Education, Bureau of Occupational and Adult Education

Authorizing Legislation:

Vocational Education Amendments of 1968, Title I, Part H, P.L. 90-576; 20 U.S.C. 1241-1391; 82 Stat. 1064-1091

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$55,000,000	$6,000,000(a)	$6,289,386(a) $1,566,057(b)

Program Objectives and Operations:

To assist economically disadvantaged full-time vocational education students, aged 15 to 20, to remain in school by providing part-time employment with public employers.

Funds may be used for the development and administration of the program and for compensation of students employed by the local educational agency or other public agencies or institutions. Each state receives funds according to the populations of 15 to 20-year-olds. Federal funds may be used for 80 percent of compensation of students. An amount not to exceed 1 percent of the allotment or $10,000, whichever is the greater, may be expended for the development and administration of the plan.

Eligible Applicants:

State boards for vocational education.

Primary Beneficiaries:

Full-time vocational education students who are in need of the earnings from such employment to commence or continue their vocational education program.

(a) These funds support both elementary-secondary and postsecondary-adult education.

(b) Estimated expenditures for postsecondary-adult education only. This estimate was developed by applying the enrollment percentage for this group to the total dollar expenditures for this program.

Available Program Data:

In FY 72, there were 30,896 persons enrolled in vocational education under the work-study program. Of these, 7,695 were at the postsecondary level. Total cumulative enrollment since the program began in 1963 is nearly 250,000 students, most of them at the secondary level.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report notes that, although the primary purpose of the work-study program is to provide income maintenance for economically deprived youths, state reports indicate other gains, such as efforts to find employment in areas related to the vocational instruction. Some typical positions held by work-study participants were: food-service worker, clerk-typist, hospital aide, printing assistant, drafting assistant, furniture repairman, and appliance repairman.

Individual work compensation cannot exceed $45 a month, and therefore, most postsecondary students must seek financial support elsewhere. It was proposed that the level of compensation be raised to at least the Department of Labor student/learner rate (75 percent of the minimum wage), but such legislation was not passed. Although some states are coordinating student aid programs on the postsecondary level, this has not yet become standard practice.

The report states that the total resources available for work study are insufficient when compared to the number of economically disadvantaged youth in school.

A recently completed study, An Assessment of School-Supervised Work Education Programs, was done for the Office of Education by Systems Development Corporation. About 20 percent of the 50 programs assessed were work-study programs. Findings indicate that dropout prevention programs are limited by their basic objective which is to keep students in school by providing them with financial assistance. While many of these programs have additional goals, such as improving disadvantaged youngsters' attitudes toward school and work, practically none of the programs attempt to offer students related classwork or intensive vocational training. When viewed in terms of their limited objectives, dropout prevention programs appear to be successful. It was found that they are more likely than cooperative work or career exploration programs to offer students jobs paying at least the minimum wage, but they were less successful than cooperative education programs in improving students' attitudes toward school.

Educational level was not a significant variable in examining work-study programs. In this type of program, educational level was not related to the students' pay, type of work, or perceptions of the job. The one exception to this was employer satisfaction ratings, with employers preferring the secondary students.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

73, 92, 95.

FOREIGN LANGUAGE AND AREA STUDIES--FELLOWSHIPS, CENTERS, RESEARCH (13.434, 13.435, 13.436)

Federal Agency:

HEW: Office of Education, Institute of International Studies

Authorizing Legislation:

National Defense Education Act, Title VI, Section 601a,b, 602, P.L. 85-854, as amended; 20 U.S.C. 511

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$38,000,000	$13,916,178	$8,090,338

Program Objectives and Operations:

To train persons in modern foreign languages and international studies to better serve the national interest in the contemporary world through organized programs and research conducted mainly in the U.S. Emphasis is placed on correcting educational imbalances through attention to languages and area studies of the non-Western world.

Grants are given to assist special foreign language and area studies centers and summer institutes at colleges and universities and to finance fellowships for advanced studies in languages and related academic fields. Research contracts fund surveys to determine the need for increased or improved instruction in modern foreign language and area studies, to develop more effective methods of teaching or learning, and to develop needed specialized materials.

Center funds may be used for faculty salaries, library acquisition, travel, administrative costs, and conferences. Fellowships provide tuition, stipend, and dependents' allowance. Fellowships are not available for the study of French, German, or Iberian Spanish.

Eligible Applicants:

Centers and fellowships--accredited American colleges and universities, with fellowships awarded through the universities to qualified individuals. Research--institutions of higher education, individual researchers, state educational agencies, other educational and professional organizations.

Primary Beneficiaries:

Institutions of higher education committed to area and language studies and individuals with a professional interest in the same.

Available Program Data:

In FY 72, approximately 1,500 graduate students and 350 advanced undergraduates received fellowships, while 39 research contracts were awarded for improvement of teaching methods and materials. At 106 foreign studies centers located at 63 universities, almost 104,000 undergraduates and graduates enrolled in courses concerning 85 modern foreign languages and related area studies ranging from agricultural economics to urban affairs. Emphasis was on world areas that have not traditionally been studied in the American curriculum. (Only one center dealt with northwestern Europe. Seventy percent of the remainder were concerned with Asian or African nations.) In the same year, six graduate and 12 undergraduate pilot programs were begun, focusing on innovative approaches to education in international affairs. Also, 27 intensive summer language programs were conducted.

In FY 73 a new competition for international studies centers was held, resulting in the selection of 50 centers for the study of Latin America, U.S.S.R. and Eastern Europe, East Asia, South Asia, Southeast Asia, the Middle East, Africa, and other international studies foci including Western Europe, Canada, the Pacific, Inner Asia, international relations, and comparative studies. The centers will be supported for three years, after which a new competition will be held. At the present time, summer language programs in the U.S. are not being offered.

Federal Evaluations/Studies:

Richard D. Lambert of the University of Pennsylvania has recently completed a study and evaluation of foreign language and area studies programs in the U.S. The bulk of these have been developed under the aegis of the NDEA Title VI. Entitled Foreign Language and Area Studies Program Review, the report is due to be published soon by the American Academy of Political and Social Science and the Social Research Council.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

FULBRIGHT-HAYS TRAINING GRANTS--FACULTY RESEARCH, FOREIGN CURRICULUM CONSULTANTS, GROUP PROJECTS, DOCTORAL DISSERTATION RESEARCH ABROAD (13.438, 13.439, 13.440, 13.441)

Federal Agency:

HEW: Office of Education, Institute of International Studies

Authorizing Legislation:

Mutual Educational and Cultural Exchange Act of 1961 (Fulbright-Hays), Section 102(b)(6), P.L. 87-256, as amended by P.L. 87-565, as amended by P.L. 89-698

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	\$1,322,179(b) \$2,642,230 (P.L. 480)	\$ 568,562(b) \$2,279,000 (P.L. 480)

Program Objectives and Operations:

The Fulbright-Hays Act programs for foreign language and area studies have four major purposes: (1) to increase the nation's manpower pool of trained specialists in foreign language, area studies, and world affairs; (2) to provide in-service training to upgrade and update the professional knowledge and skills of existing specialists in the same fields; (3) to produce new knowledge about other nations and cultures, especially those of the non-Western world; and (4) to develop curricula and instructional materials in foreign languages, area studies, and world affairs needed by education, government, and business.

Project grants are given to assist American education in improving foreign language studies, world area studies, and international studies by providing direct contact with other cultures and countries. Faculty and doctoral dissertation research fellowships provide round-trip airfare, stipend and dependents' allowance, local travel allowance, and project allowances. Group project grants (including summer seminars and any programs for training and education, intensive language projects, ethnic heritage seminars and project allowances) are cost-sharing grants which provide support on the institutional level. Federal funds under this program are generally used for international transportation, stipends for individual participants, and overseas administration costs. Finally, curriculum consultant grants finance the cost of air transportation, provide dependents' allowance and 50 percent of a $1,000 monthly maintenance allowance (the other 50 percent to be provided by the grantee institution) for foreign educational experts to serve American institutions as curriculum consultants.

(a) The Fulbright-Hays program receives funds through an indefinite authorization each year.

(b) The Fulbright-Hays programs receive funds from two sources: (1) from funds given as regular budget dollars and authorized under the Fulbright-Hays Act; and (2) from P.L. 480 funds, which are foreign monies accumulated in the U.S. account as part of trade agreements. They are given only for specified use in the country where the account exists. The figure for these funds is given in equivalent U.S. dollars.

Funds are usually granted for research or projects in those countries where U.S.-owned foreign currencies are available for educational use.

Eligible Applicants:

Faculty and doctoral dissertation research--U.S. citizens (or nationals, for doctoral candidates). Project grants and foreign curriculum consultant programs--accredited American colleges or universities, state departments of education, nonprofit educational organizations, large school systems.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 151 Ph.D. candidates received fellowships for research or studies in 53 different coutries on such topics as decisionmaking in Japanese industry and the political dynamics of health care in China. Twenty-five faculty fellowships were available mainly for research in countries where U.S.-owned foreign currency is available.

Group projects in FY 72 provided advanced language training in Polish, Chinese, Serbo-Croatian, and Japanese, as well as training and materials for teachers, prospective teachers, faculty, and administrators at all educational levels.

Finally, 14 curriculum development grants provided specialists in education from nine countries the opportunity to help U.S. schools and higher education institutions build programs in international studies.

Federal Evaluations/Studies:

While no formal evaluations of these programs have been conducted, a forthcoming report by Richard Lambert, entitled Foreign Language and Area Studies Program Review, which deals directly with some of the problems of language study, and consequently with some of the issues involved with the Fulbright-Hays Act, is due to be published during the Fall, 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

TEACHER EXCHANGE (FULBRIGHT EXCHANGE) (13.437)

Federal Agency:

HEW: Office of Education, Institute of International Studies

Authorizing Legislation:

Mutual Educational and Cultural Exchange Act of 1961, P.L. 87-256; 75 Stat. 527, as amended; P.L. 83-480, as amended; 22 U.S.C. 2451-2458; 7 U.S.C. 1704

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$30,600 $50,000(a)	$76,713(b)

Program Objectives and Operations:

To increase mutual understanding between the people of the United States and those in other countries by offering qualified American teachers the opportunities either to teach for an academic year in elementary or secondary schools abroad or to attend summer sessions abroad.

Grants offer individual instructors financial assistance to teach abroad in a variety of ways, including round-trip transportation and maintenance allowances. No transportation money is provided for dependents.

Eligible Applicants:

Elementary and secondary school teachers, college instructors, and assistant professors. Applicants must have at least a bachelor's degree; must have at least three years of successful full-time teaching experience to teach abroad (two years for summer seminars); and must be currently teaching.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Basic authority for this program is vested in the Bureau of Educational and Cultural Affairs, Department of State, to which Congress appropriates the funds. The Office of Education acts as agent for the Department of State in carrying out program operations.

(a) This figure represents P.L. 480 (Food for Peace) funds utilized under this program.

(b) Expenditures include both dollars and P.L. 480 funds which cannot be separated.

During FY 72, approximately 250 American teachers and 130 foreign teachers received grants as part of the Teacher Exchange program. The majority (99) of the American teachers taught in Western Europe, although smaller numbers received posotions in Greece, Eastern Asia, and Eastern Europe.

The participants in the program in that year represented a variety of academic interests, including the humanities, the social sciences, education, engineering, natural or physical science, and agriculture or food science.

Federal Evaluations/Studies:

No evaluations dealing specifically with this program have been done.

EDUCATIONAL BROADCASTING FACILITIES (PUBLIC BROADCASTING) (13.413)

Federal Agency:

HEW: Office of Education, National Center for Educational Technology

Authorizing Legislation:

Communications Act of 1934, Part IV of Title III, P.L. 87-447 enacted May 1, 1962, as amended by P.L. 90-129, P.L. 91-97, P.L. 92-411, and P.L. 92-84; 47 U.S.C. 390-395, 397-399

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$13,000,000 PSE $ 3,197,304	$12,182,000 PSE $ 2,996,772[a]

Program Objectives and Operations:

To provide matching grants for acquisition and installation of electronic equipment to be used in noncommercial educational broadcasting stations serving the educational, cultural and informational needs of Americans in homes and schools.

The maximum federal share is 75 percent. The total amount of federal funds which may be granted in any one state is limited to 8.5 percent of the appropriation of that fiscal year.

Eligible Applicants:

(1) Agency or officer responsible for supervision of public education within a state or political subdivision thereof; (2) state educational television and/or radio agency; (3) tax-supported college or university; (4) nonprofit corporation organized primarily to operate an educational television or radio station; (5) a municipality which owns or operates a facility used only for noncommercial educational broadcasting.

Primary Beneficiaries:

The general public.

Available Program Data:

In FY 72, a total of 69 projects were funded; 43 were TV projects and 26 were radio projects. Of the total, 24 were at postsecondary institutions; 11 of these were TV projects, and 13 were radio projects. Federal grants were used

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(a) This estimated figure was derived from calculating the postsecondary education component of the total obligation figure and applying that same percentage to the total expenditure figure.

to help establish TV broadcasting facilities at Michigan State University, East Lansing, and the University of New Mexico, Las Cruces. Funds were provided to expand or improve nine other college-based TV broadcasting facilities. All radio broadcasting facilities at postsecondary institutions were used to expand or improve those facilities. Of the obligations that went to postsecondary institutions, $2,640,952 supported TV projects, and $556,352 supported radio projects.

Federal Evaluations/Studies:

An ongoing study contracted by the Office Of Education is expected to be completed by December, 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

75, 95.

EDUCATIONAL PERSONNEL TRAINING GRANTS--CAREER OPPORTUNITIES (CAREER OPPORTUNITIES PROGRAM, COP) (13.421)

Federal Agency:

HEW: Office of Education, National Center for the Improvement of Educational Systems

Authorizing Legislation:

Education Professions Development Act, Part D, Section 531, P.L. 90-35; 20 U.S.C. 1111-1119a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$82,182,000(a)	\$26,172,737	\$20,311,000

Program Objectives and Operations:

To improve education of children from low-income areas by employing low-income community residents and Vietnam veterans as education auxiliaries in poverty area schools while they train toward potential teacher certification.

Grants may be used to supervise, train, or better qualify persons who are serving or preparing to serve in elementary or secondary education. Funds cover instructional costs and stipends for veterans and for other participants under special circumstances. Local education agencies are encouraged to supply a portion of the funds themselves or to seek them from outside sources.

Eligible Applicants:

Local education agencies, aided by state departments of education, are eligible for COP projects, which must be located in areas where there is the highest concentration of low-income families. Only in very exceptional cases will colleges or universities be prime contractors; although in all cases they must be included as partners in the training program.

Primary Beneficiaries:

Residents of the area served by COP schools.

Available Program Data:

In FY 72, COP operated in 132 project sites. It had 8,000 participants working in 1,090 schools and affecting approximately 250,845 children from low-income areas. A total of 210 colleges were involved with COP efforts. Of the 200 aides who finished college training in FY 72, 92 percent were hired as teachers in the school systems where they had received training. Eighty-three percent of the participants were members of a minority group. Eleven hundred veterans were teaching in classrooms.

(a) Authorization for all of EPDA Part D. Individual program authorization figures are unavailable.

Federal Evaluations/Studies:

In FY 72, Abt Associates, Inc. conducted a national impact evaluation of COP for the Office of Education. It was found that the aides are representative of the targeted program population; they show strong motivation to continue in the program and become teachers; and they seem to have a positive professional view of themselves. Thus it appears that the program has provided a vehicle for upward mobility for the aides.

Superintendents, principals, teachers, and COP aides are highly satisfied with the program. Principals view COP aides as more professional than other teacher aides with whom they have worked, and they desire more in their classrooms. They are especially appreciative of the increased amount of individual attention that the aides can afford their students. Superintendents view the COP aides as helpful linkages between their schools and the community. They want more aides for both regular classes and special students, and there is some evidence that requirements are less restrictive in the hiring of teachers when COP is in the school system. To accommodate COP, and also as a result of COP experience, institutions of higher education have initiated changes in course content, schedules, and entrance requirements. State education agencies show a positive relationship between the presence of COP in their schools and changes in credentialing requirements.

No evidence has yet been gathered to show a positive impact on student academic performance and attitudes.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

81, 95.

EDUCATIONAL DISSEMINATION (13.513)

Federal Agency:

HEW: National Institute of Education(a)

Authorizing Legislation:

Cooperative Research Act, P.L. 83-531, 68 Stat. 533, as amended by the Elementary and Secondary Education Act of 1965, P.L. 89-10, Title IV, 79 Stat. 44; 20 U.S.C. 331

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$7,596,000 PSE $3,441,495(b)	$6,472,000 PSE $2,912,400(c)

Program Objectives and Operations:

To (1) accelerate the spread and installation of validated practices and research-based products; (2) strengthen state and local education agency communication capabilities; (3) increase access to the current knowledge base in education through Educational Resources Information Centers; (4) provide interpreted information to educational decision makers; and (5) apply research and development toward improving dissemination.

Eligible Applicants:

Local school systems, state departments of education, colleges, universities, and other public or private agencies, organizations, groups, or individuals. Profitmaking organizations are eligible for research support contracts but not for grants.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This program is described as it was administered by the Office of Education in FY 72.

(b) This figure was derived from adding the obligation amounts of projects based at universities and those at various sites which dealt with postsecondary education.

(c) This estimated figure was derived from calculating the postsecondary education component of the total obligation amount and applying that same percentage to the total expenditure amount.

Available Program Data:

In FY 72, projects at 22 colleges and universities were supported and seven projects dealt with postsecondary education. These two categories are not mutually exclusive. Educational Resources Information Centers (ERIC) projects accounted for 12 of the dissemination programs which were based at universities and five of the projects that were concerned specifically with postsecondary education. An example of an ERIC project is the ERIC clearinghouse on higher education at George Washington University, Washington, D.C. The program was transferred to the National Institute of Education in FY 73.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that no formal assessment of the Spread of Exemplary Practices portion of the dissemination program has yet been completed. In FY 71, OE initiated four formal evaluation studies on critical aspects of the ERIC portion of the dissemination program: (1) an assessment of the quality and utility of ERIC clearinghouse products; (2) a study to define and categorize the user community; (3) to analyze the present structure and composition of the ERIC files; and (4) to offer cost-beneficial strategies for organizing the files for easier practitioner use. No evaluation of the general impact of the Interpretive Summaries aspect of the dissemination program has been undertaken. However, some studies have been conducted to identify user needs: Innovative Problems and Information Needs of Educational Practitioners, 1970 and Developing a Sensing Network for Information Needs in Education, 1972.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

80, 95.

EDUCATIONAL RESEARCH AND DEVELOPMENT CENTERS (R&D CENTERS AND POLICY CENTERS) (13.411)

Federal Agency:

HEW: National Institute of Education(a)

Authorizing Legislation:

Cooperative Research Act, P.L. 85-531, 68 Stat. 533, as amended by the Elementary and Secondary Education Act of 1965, P.L. 89-10, Title IV; 79 Stat. 44; 20 U.S.C. 331

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$9,500,000	$6,707,000
	PSE $8,616,205(b)	PSE $6,083,040(d)
	$ 773,755(c)	

Program Objectives and Operations:

To create improved educational programs and practices through systematic long-term programs of research and development; and to focus on a significant educational problem and to design and conduct interrelated programs of basic and applied research development and dissemination that will systematically move toward the solution of the problem.

Eligible Applicants:

Universities in an area where continuous and significant educational advances can be expected.

(a) This program is described as it was administered by the Office of Education in FY 72.

(b) This figure is the obligation total for the eight R&D Centers, plus R&D monies obligated for the Western Interstate Commission on Higher Education (WICHE). For a further discussion of WICHE see Regional Educational Laboratories, p. 435.

(c) This figure includes obligations for Policy Centers which were based at universities, as well as funds for the review and evaluation of the Laboratories and Centers which went to persons who were university-based. These funds were Planning and Evaluation funds and are not included in the total $9,500,000 obligation figure above. Expenditure figures for the Policy Centers and for the review and evaluation of the Laboratories and Centers are unavailable.

(d) This estimated figure was derived from calculating the postsecondary education percentage of the total obligation amount and applying that percentage to total expenditures.

Primary Beneficiaries:

Educational institutions at all levels.

Available Program Data:

In FY 72, eight R&D Centers were funded. There were also two policy centers, one at Stanford Research Institute and the other at Syracuse University Research Corporation. The R&D Center at Berkeley dealt specifically with research and development in higher education and the Center for the Study of the Evaluation of Instructional Programs at the University of California at Los Angeles devoted part of its research specifically to postsecondary education. R&D Center monies also funded the Urban Career Education Program at Opportunities Industrialization Centers of America, Inc., Philadelphia.

R&D Center funds, not included in the postsecondary obligation figure ($8,616,205), supported the National Program on Early Childhood Education located in St. Louis, Missouri.

This program was transferred to the National Institute of Education in FY 73.

Federal Evaluations/Studies:

A comprehensive evaluation of the Laboratories and Centers programs was begun in the spring of 1972 in anticipation of their transfer to the National Institute of Education (NIE) and will be completed by NIE. Other evaluation studies include: (1) American Institutes for Research, Development and Tryout of an Evaluation System for Ascertaining the Effectiveness of Educational Laboratories and R&D Centers; (2) Ohio State University Research Foundation, Design of a Planning and Assessment System for the Division of Manpower and Institutions, 1971; and (3) Resource Management Corporation, Cost Factors for Educational Research and Development: An Exploratory Investigation, 1971.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

80, 95.

EDUCATIONAL RESEARCH AND DEVELOPMENT--GENERAL EDUCATION (PROJECT) RESEARCH (COOPERATIVE RESEARCH) (13.422)

Federal Agency:

HEW: National Institute of Education(a)

Authorizing Legislation:

Cooperative Research Act, P.L. 83-531, 63 Stat. 533, as amended by the Elementary and Secondary Act of 1965, P.L. 89-10, Title IV, 79 Stat. 44; 20 U.S.C. 331; and subsequent acts

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$5,321,722	$5,227,000
	PSE $3,068,956(b)	PSE $3,014,331(b)

Program Objectives and Operations:

To improve general educational teaching and learning through basic and applied research and development.

To improve general educational activities which are not limited to the settings in which they are carried out. Support is not available for purely operational activities, which normally are supported from local funds or from other sources. However, support may be requested for the research component of operational programs.

Eligible Applicants:

Colleges, universities, state departments of education, or other public or private profit or nonprofit agencies, organizations, groups, or individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Approximately 55 of the 106 research projects were based at postsecondary institutions. Six of these dealt specifically with postsecondary education.

(a) This program is described as it was administered by the Office of Education in FY 72.

(b) This estimated figure was derived from calculating the postsecondary education component of the total obligation amount and applying that same percentage to the total expenditure amount.

This program was transferred to the National Institute of Education in FY 73 and the program name is now Grants for Research in Education.

Federal Evaluations/Studies:

According to the Office of Education's Annual Evaluation Report there have been no recent formal evaluation studies of this program nor are any currently under way or planned for the near future.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

80, 95.

EDUCATIONAL RESEARCH AND DEVELOPMENT--REGIONAL EDUCATIONAL LABORATORIES (13.412)

Federal Agency:

HEW: National Institute of Education[a]

Authorizing Legislation:

Cooperative Research Act, P.L. 83-531, 68 Stat. 533, as amended by the Elementary and Secondary Education Act of 1965, P.L. 89-10, Title IV, 79 Stat. 44; 20 U.S.C. 331

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$22,531,000	$17,304,000
	PSE $ 1,017,000[b]	PSE $ 781,064[c]

Program Objectives and Operations:

To develop tested materials and procedures to produce specific learning behaviors or changes in practice for students and teachers from preschool through college. Laboratory programs (which are efforts in educational development to formulate, field test, and refine curriculum materials and to improve instructional systems) are limited to developments that can be implemented by public or private school systems to improve educational systems.

Eligible Applicants:

Regional Educational Laboratories.

Primary Beneficiaries:

Educational institutions at all levels.

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[a] This program is described as it was administered by the Office of Education in FY 72.

[b] This figure is the obligation for the Durham, N.C. Laboratory, the only laboratory involved in postsecondary education which is funded exclusively from laboratory monies.

[c] This estimated figure was derived from calculating the postsecondary education percentage of the total obligation amount and applying that same percentage to the total expenditure amount.

Available Program Data:

Of the 12 laboratories funded in FY 72, only two dealt with postsecondary education. The Western Interstate Commission for Higher Education (WICHE) in Boulder, Colorado, was involved in research on a "Regional Cooperative Project among Higher Educational Institutions and Coordinating Agencies to Design, Develop, and Implement Information Systems and Data Bases Including Common Uniform Data Elements." A second laboratory which analyzed post-secondary education was the National Laboratory for Higher Education in Durham, North Carolina. This program was transferred to the National Institute of Education in FY 73.

Federal Evaluations/Studies:

For sources of evaluation studies see the R&D Center Program, p. 431.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

80, 95.

EDUCATIONAL RESEARCH TRAINING (13.424)

Federal Agency:

HEW: National Institute of Education[a]

Authorizing Legislation:

Cooperative Research Act, P.L. 83-531, 68 Stat. 533, as amended by the Elementary and Secondary Education Act of 1965, P.L. 89-10, Title IV, 79 Stat. 44, and by P.L. 89-750, Title I, Part D, 80 Stat. 202, and P.L. 90-247, Title VII, Section 706; 81 Stat. 820; 20 U.S.C. 331

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$3,255,000	$4,844,000
	PSE $2,659,683	PSE $3,957,548[b]

Program Objectives and Operations:

To increase the number and competency of professionally trained educational research, development, dissemination, and evaluation personnel through support of graduate, inservice, and other training activities, and the development of more effective training programs and resources.

Eligible Applicants:

Colleges and universities, state and local educational agencies and systems, and other public and nonprofit organizations.

Primary Beneficiaries:

Individuals having current or potential major responsibilities in educational research and development.

Available Program Data:

Graduate and post-doctoral fellowship programs supported since 1966 are being converted to self-support by the end of 1973. In FY 72 fellowship support was given to 100 remaining students who were in their final year of work. The emphasis since 1971 has been on the development and demonstration of training techniques and materials that can be adopted in many institutions which wish to improve their training capability. In FY 72 approximately 50 training development programs were funded at postsecondary institutions.(c)

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[a] This program is described as it was administered by the Office of Education in FY 72.

[b] This estimated figure was derived from first calculating the percentage the PSE component was of the total obligation (81.7) and applying that same percentage to the total expenditures.

Federal Evaluations/Studies:

Although there have been no recent evaluations of the impact and effectiveness of the Research Training program as a whole, some studies have been concerned with the fellowship aspect of this program. One of these, by the American Educational Research Association (AERA), evaluated the fellowship program prior to its being phased out. The study found that although criticisms of the quality of the training programs and of the trainees may have had some validity when applied to individual cases, they could not be applied to the entire training program or group of trainees. Generally, the host schools were rated as good educational institutions: 63 percent of the doctoral programs and 64 percent of the subdoctoral programs which were continuing in 1969 were held at institutions rated for the quality of their research. Many of the host institutions not rated for research quality were noted for overall academic quality.

A strong interdisciplinary emphasis was found to exist in the Title IV training programs. Three-fourths of the 1969-70 doctoral candidates were recruited from undergraduate fields outside education, about half held master's degrees in fields other than education, and approximately one-fourth were getting their degrees outside education. Nearly 40 percent of the programs provided some interdisciplinary training, including some in which degrees were granted in education. An increasingly larger proportion of the trainees moved into the education field as they received higher degrees. However, a study, cited in this evaluation, has shown that outstanding educational researchers generally have a background in a substantive rather than a professional field, but the degree or emphasis of advanced work need not be in a substantive field.

The Graduate Record Exam (GRE) and Miller Analogies Test (MAT) scores received by a majority of the 1969-70 participants were as high as or higher than the scores received by a majority of the students in almost every professional and substantive field researched.

The AERA study indicates that the process of selecting certain Title IV training programs for continuation and termination or placing others on probation has been effective in retaining the programs in which trainees showed the most academic ability. The candidates in continuing doctoral programs showed a mean GRE score of 75 points higher than the mean scores of trainees in probationary and discontinued programs.

The study concluded that termination of all or additional segments of the Title IV training programs would disrupt the preparation of highly qualified students in educational research and would result in the loss of a large number of these students from the field of educational research altogether.

(c) This program was transferred to the National Institute of Education in FY 73.

It should be noted that the fellowship aspect of the training program is being phased out. A recent study by the Bureau of Applied Social Research, was critical of this cutback, taking the position that the needs of educational research and development (R&D) are defined in terms of the number of available positions which are created or terminated at will by the Office of Education (or the National Institute of Education), thereby making training a "service appendage" to the other OE programs. The author maintains that since it may take several years to train people in certain R&D activities, a training lag would tend to "sabotage" the programs that are already under way. After shifting the training emphasis, the original programs might be cut for lack of productivity, causing another shift in training, thus developing a self-perpetuating cycle.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

3, 4, 80, 95.

EXPERIMENTAL SCHOOLS (13.521)

Federal Agency:

HEW: National Institute of Education(a)

Authorizing Legislation:

Cooperative Research Act of 1954, P.L. 83-351, as amended by Title IV of the Elementary and Secondary Education Act of 1965, P.L. 89-10; 20 U.S.C., Section 331a

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$14,650,000	$5,273,000
	(PSE) $ 168,456	(b)

Program Objectives and Operations:

To serve as a bridge from research, demonstration, and experimentation to actual school practice by testing and evaluating the relative efficacy of comprehensive alternatives to current school practies, performance, and structures.

Eligible Applicants:

Universities, colleges, or other public (including state and local education agencies) or private, profit or nonprofit agencies, institutions, or organizations.

Primary Beneficiaries:

The kindergarten through 12th grade population. Preschool and posthigh school components are also fundable.

Available Program Data:

Research and evaluation studies were done at four colleges and universities during FY 72. A study dealing with experiments in postsecondary community-oriented education was also supported. This program was transferred to the National Institute of Education in FY 73.

(a) This program is described as it was administered by the Office of Education in FY 72.

(b) The PSE expenditure component is not available. It is estimated to be slightly less than the PSE obligation amount.

Federal Evaluations/Studies:

The Office of Education's Annual Evaluation Report states that no formal assessment of the Experimental Schools program has yet been completed. Several studies are being made of the programs which become operational. Similar studies will be initiated for each new project. In addition, at least one study will evaluate the program as a whole.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

95.

RESEARCH AND DEVELOPMENT--REGIONAL RESEARCH (SMALL PROJECT RESEARCH) (13.476)

Federal Agency:

HEW: National Institute of Education(a)

Authorizing Legislation:

Cooperative Research Act, P.L. 83-531, 68 Stat. 533, as amended by the Elementary and Secondary Education Act of 1965, P.L. 89-10, Title IV, 79 Stat. 44; 20 U.S.C. 331

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,796,278	$1,446,000
	PSE $1,566,030	$1,258,020(b)

Program Objectives and Operations:

To support significant unsolicited research and to increase research manpower and resources through encouragment of new researchers and institutions without research tradition.

Eligible Applicants:

Colleges, universities, state departments of education, or other public or private agencies, organizations, groups, or individuals with institutional or organizational sponsorship.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Approximately 222 regional research projects were funded in FY 72, of which about 190 were based at postsecondary institutions. Also, about 36 projects dealt with research specifically concerning postsecondary education. These two groups were not mutually exclusive. This program was transferred to the National Institute of Education in FY 73, and the program name is now Grants for Research in Education.

(a) This program is described as it was administered by the Office of Education in FY 72.

(b) This estimated figure was derived by calculating the postsecondary percentage of the total obligation figure and applying that same percentage to the total expenditure figure.

Federal Evaluations/Studies:

According to the abstract, a Bureau of Applied Social Research study examined the distribution of applicants for small grants, the consequences of being funded, and the processing of proposals. The following data were collected on every applicant submitting a proposal in FY 68:
(1) questionnaires from applicants, both funded and not funded; (2) factual material from proposals submitted; (3) questionnaires from field readers;
(4) field reader rating of proposals and funding recommendations; and
(5) interviews with the directors of educational research at the nine regional offices.

The report is concerned with the history of a research project from submission of the research plan through dissemination of the findings. A major conclusion of the study is that the Regional Research Program was successful in its goal of identifying and supporting less-established researchers. Another finding was that the availablity of support through the program for doctoral dissertations was a major factor in producing talented educational researchers.

The Office of Education's Annual Evaluation Report states that there are no evaluation studies under way or planned for the near future.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

5, 80, 95.

DRUG ABUSE PREVENTION (13.420)

Federal Agency:

HEW: Office of Education, Office of the Commissioner

Authorizing Legislation:

Drug Abuse Education Act of 1970, P.L. 91-527

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$20,000,000	$12,400,000	$6,916,000
	PSE $ 631,244	$ (a)

Program Objectives and Operations:

To help schools and communities assess and respond to drug abuse by becoming aware of the nature of the problem and developing strategies aimed at its causes rather than merely its symptoms; to encourage coordinated community efforts; to develop leadership teams at both the state and local level through a variety of training programs; and to give technical assistance to programs developed by such teams as specific needs are identified.

Under Section 3, grants or contracts may be used to support research, demonstration, and pilot projects designed to educate the public on problems related to drug abuse. Under Section 4, grants or contracts may be used to plan and carry out community-oriented education programs on drug abuse and drug dependency.

Eligible Applicants:

Section 3--Institutions of higher education, state and local educational agencies, and other public and private education or research agencies, institutions, or organizations. Section 4--Public or private nonprofit agencies, organizations, and institutions.

Primary Beneficiaries:

Teachers, counselors, and other educational personnel; law enforcement officials; public service and community leaders and personnel; persons in the community.

(a) The postsecondary education component of the total expenditures is unavailable.

Available Program Data:

The 20 college-based projects funded in FY 72 had an impact on approximately 1,200 students through education and training activities, 110,000 students through direct services such as hot-lines and drop-in centers, and 29,000 through indirect services such as pamphlets or mass media. A listing of the program activities and targets during 1971-72 is available from the Drug Abuse Prevention program.

Federal Evaluations/Studies:

There are no overall evaluation studies of this program. An evaluation of selected projects under contract to BRX, Inc. and E. F. Shelley, Inc., Washington, D.C. is expected to be completed by June 30, 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

89, 95.

ENVIRONMENTAL EDUCATION (13.522)

Federal Agency:

HEW: Office of Education, Office of the Commissioner

Authorizing Legislation:

Environmental Education Act, P.L. 91-516

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,000,000	$3,085,000 PSE $ 635,100[a]	$2,043,000 PSE $ 429,030[a]

Program Objectives and Operations:

To educate citizens on the problems of environmental quality and ecological balance. The program assists in community education projects, environmental education centers, inservice training projects for noneducational and educational personnel, pilot elementary and secondary education programs carried out by local educational agencies.

Eligible Applicants:

Accredited colleges, universities, and postsecondary schools; local and state educational agencies; regional educational research organizations; and other public and private nonprofit agencies, organizations, and institutions.

Primary Beneficiaries:

Eligible applicants, participants in the training projects, and general citizenry.

Available Program Data:

Of the 162 projects funded in FY 72, 41 were at postsecondary institutions. These included curriculum development, personnel training, workshops, community education, and dissemination centers in urban, suburban, and rural areas in 19 states, the District of Columbia, and Micronesia. Grants ranged from $2,300 to $37,000, the average being $15,490.

Federal Evaluations/Studies:

The Annual Evaluation Report of the Office of Education states that there are no evaluation studies nor are any ongoing or planned.

(a) Projects in postsecondary schools accounted for approximately 21 percent of the total obligations. It was assumed that the same percentage would apply to the postsecondary portion of expenditures.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

76, 95.

RIGHT TO READ(a)

Federal Agency:

HEW: Office of Education, Office of the Commissioner

Authorizing Legislation:

Title III, Elementary and Secondary Education Act, 1965, as amended; Title VII ESEA, 1965; Adult Basic Education Act, 1966; Title IV, Higher Education Act, 1965; Education Professions Development Act, Parts D and E; General Education Provisions Act, Sections 402 and 412

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$11,774,000	$4,709,600(b)
	PSE $ 3,211,616	PSE $1,284,646(c)

Program Objectives and Operations:

To substantially increase functional literacy in this country. This program seeks to help all reading programs to become effective, regardless of the source of funding, the level of instruction, or the age of the participants.

Right to Read hopes to influence federal formula grant and discretionary funds as well as state and local funds. It involves experimental, demonstration, service, and support activities. A limited number of grants and contracts also are awarded under this program.

Eligible Applicants:

Public and private nonprofit institutions, agencies, and organizations.

Primary Beneficiaries:

Participants in the program.

(a) This program is not included in the FY 72 OMB catalog.

(b) According to Office of Education budget officials, the expenditure figure equaled approximately 40 percent of the obligation.

(c) This estimated figure was derived by calculating the postsecondary percentage of the total obligation amount and applying that same percentage to the total expenditure figure.

Available Program Data:

Of the 244 projects funded in FY 72, 74 were community-based programs directed toward the out-of-school adolescent population, the young adult, and the older adult in need of reading assistance. Approximately 7,400 out-of-school clients were served by the program. Community-based projects were sponsored by 19 universities, 18 colleges, 14 community colleges, 18 community agencies, and five libraries. Projects were located in prisons, community colleges, the inner city, and reservations.

Federal Evaluations/Studies:

The Summary Results of the 1973 Self-Evaluation Reports of the Right To Read Community-Based Programs concluded that the programs had successfully met their objectives. The evaluation objective was that as least 50 percent of the community-based programs would achieve one month of gain in reading achievement for each month of participation in the program. Sixty-two out of 74 projects responded to the questionnaire.

Of the responding programs, 33 (53 percent) achieved the evaluation objective, one (2 percent) did not achieve the evaluation objective, and 28 (45 percent) were categorized as indefinite. The indefinite category included projects which started late due to funding problems, projects with an objective which could not be evaluated in terms of reading progress, and programs for which there were incomplete or inappropriate data.

The study concluded that the objectives were met. Even if the most conservative comparison is made between the number which definitely met the objective (33) and the total number of programs (74), the percentage of programs that met the objectives was still 45 percent.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

87, 95.

SPECIAL SCHOOLS[a]

Federal Agency:

HEW: Office of the Secretary

Authorizing Legislation:

National Technical Institute for the Deaf Act, P.L. 89-36; 20 U.S.C. 681-685; P.L. 420, as amended, P.L. 86-776, 14 Stat. 438, 538, 539; 20 U.S.C. 121

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$128,625,000	$71,250,000
	PSE $126,625,000	PSE $70,142,128

Program Objectives and Operations:

National Technical Institute for the Deaf: To provide a residential facility for postsecondary technical training and education for persons who are deaf in order to prepare them for successful employment. Gallaudet College: To provide education and training to deaf persons and otherwise to further the education of the deaf. Howard University: To establish a university for the education of youth in the liberal arts and sciences.

Eligible Applicants:

The three schools noted above.

Primary Beneficiaries:

Students at these institutions.

Available Program Data:

In FY 72, there were 431 students enrolled in the National Technical Institute for the Deaf. Of the 1,060 students enrolled in Gallaudet College, 64 were graduate students and 996 were undergraduates. At Howard University, there were a total of 11,388 students, of which 3,847 were undergraduate, 1,598 were graduate, 5,674 were professional, and 249 were medical students. A portion of the federal funds obligated to these institutions provided direct aid to students. Details of this financial aid are not available from HEW.

Howard University received 69.4 percent of the obligation amount, while Gallaudet received 6.6 percent and National Technical Institute for the Deaf received 24 percent.

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[a] This program is not described in the FY 72 OMB catalog.

Federal Evaluations/Studies:

There have been no specific evaluations of the special schools program funds.

CHILD DEVELOPMENT--CHILD WELFARE RESEARCH AND DEMONSTRATION GRANTS (13.608)

Federal Agency:

HEW: Office of the Secretary, Office of Child Development

Authorizing Legislation:

Social Security Act, as amended, Title IV, Part B, Section 426; P.L. 86-778; P.L. 96-248; 42 U.S.C. 626

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$11,500,000	$11,418,974 $ 6,138,815(a)	$681,998(b) (a)

Program Objectives and Operations:

To provide financial support for research and demonstration projects relating to early childhood intervention programs, youth studies, school-age parents, and preparation for establishing stable family life.

Grants are awarded for research and demonstration projects of national or regional significance for child welfare or for demonstration projects of new methods, facilities, or research which either show promise of substantial contribution to the field or tend to encourage experimental and innovative types of child welfare services. Contracts are awarded for the conduct of more general research or demonstration projects.

Eligible Applicants:

Public or nonprofit educational institutions, agencies, or organizations engaged in child welfare activities or research are eligible for grants and/or contracts. In addition, private organizations are eligible for contract awards.

Primary Beneficiaries:

Persons and institutions involved in child welfare activities as well as children and their families.

(a) This figure represents the amount of grant obligations either received by postsecondary education or funding some type of postsecondary training in FY 72. No equivalent information is available concerning expenditures for postsecondary education.

(b) Since awards are made on a forward year funding basis, most of the expenditures represent FY 71 obligations which totaled slightly over $4,000,000, thus accounting for the small amount of expenditures in FY 72.

Available Program Data:

During FY 72, the Office of Child Development provided over $5,751,000 in federal funds to help finance 67 projects at universities and colleges in fields ranging from early childhood education to social policy. The specific types of projects varied from pure research studies to developmental grants for child advocacy programs, as well as evaluations of current programs.

Funds also were awarded to six nonuniversity grantees to conduct training programs ranging from instruction in child care for unwed mothers to the social service training of lay and professional people in a rural community.

Federal Evaluations/Studies:

No overall evaluations have been done of this research and demonstration program, although evaluations of other child development programs have been completed with these research and development funds.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

96.

SURPLUS PROPERTY UTILIZATION (FEDERAL PROPERTY DONATION PROGRAM) (13.606)

Federal Agency:

HEW: Office of the Secretary, Office of Surplus Property Utilization

Authorizing Legislation:

Federal Property and Administrative Services Act of 1949, as amended; sections 203(j) and (k); P.L. 81-152; 40 U.S.C. 484

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$399,118,604 [a]	$291,262,892 [b]

Program Objectives and Operations:

To donate all available federal surplus personal properties and to convey all available federal real properties which are needed and usable by eligible organizations and institutions to carry out health and education programs in their states.

The General Services Administration (GSA) makes available personal properties to HEW to be distributed to designated state agencies, which in turn make individual donations of such properties to eligible health or educational institutions. Donees pay a nominal service charge to cover costs of care and handling.

GSA also makes surplus real property available. Upon receipt of an approvable health or education application from an eligible institution, HEW requests GSA to assign the property to the Department, which in turn deeds it to the institution subject to restrictions requiring use for a determined period of years. The fair value of the property is subject to a public benefit discount, usually 100 percent; however, the applicant is required to pay all external administrative costs incidental to transfer, which may include surveys, appraisals, title search, closing fees, etc.

Eligible Applicants:

For personal property donations: approved or accredited tax-supported or private nonprofit, tax-exempt medical institutions, schools, school systems,

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(a) This figure is not an obligation or expenditure amount but represents the original acquisition cost of personal property donated by the various state agencies for health, education, and civil defense purposes and real property transferred by HEW for health and education purposes in FY 72.

(b) This amount represents donations only to educational institutions, including secondary schools.

colleges and universities, schools for the mentally retarded and the physically handicapped, licensed educational radio and television stations, and public libraries. For real property: the same, but also including states, their political subdivisions and instrumentalities.

Primary Beneficiaries:

Anyone working with or for the eligible applicants.

Available Program Data:

Personal Property: Personal property having an acquisition cost of $359,139,043 was donated for health, education, and civil defense purposes in FY 72. Approximately 74 percent ($265,762,892) was donated for education purposes. The service and handling charges assessed by the various state agencies (state agencies' expense in locating, screening, transporting, and warehousing property) amounted to less than $13,241,000.

Real Property: Real property having an acquisition cost of $39,979,561 was transferred for health and education purposes in FY 72. Twenty-seven (27) parcels of real property, a total of 873 acres, having an acquisition cost of approximately $25,500,000 was conveyed to postsecondary institutions.

Federal Evaluations/Studies:

No formal evaluations of this program have been undertaken.

SOCIAL AND REHABILITATION SERVICE RESEARCH (13.757)

Federal Agency:

HEW: Social and Rehabilitation Service

Authorizing Legislation:

Social Security Act, as amended, Title IV, Part B, Section 426, Title XI, Sections 1110, P.L. 86-778, P.L. 96-248, and P.L. 88-452; 42 U.S.C. 626, 1310, and 1315; Vocational Rehabilitation Act, as amended, Section 4(a)(1), P.L. 88-565 and P.L. 90-391; 29 U.S.C. 4, 31; Older Americans Act, as amended Title IV, P.L. 90-42 and P.L. 91-69; International Health Research Act of 1960, P.L. 86-610; 29 U.S.C. 34(a)(1) and 37(a)(2); U.S.C. 3041 and 3042

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$63,739,000 PSE $22,213,000 (b)	$49,282,000 PSE $17,412,196 (c)

Program Objectives and Operations:

To discover, test, demonstrate, and promote utilization of new social and rehabilitation service concepts which will provide service to dependent and vulnerable populations of the poor, the handicapped, the aged, children, and youth.

Research in the SRS, though administered through a single grants office, is actually a conglomeration of separate programs. Specific program guidelines vary according to program. The agency conducts this research through the award of contracts and grants to qualified organizations or institutions. Projects should be innovative and of national significance as well as responsive to the program priorities of public assistance, vocational rehabilitation, aging, and child welfare.

(a) The Social and Rehabilitation Service (SRS) research actually consists of a number of programs administered by the various divisions of the SRS; program authorizations are split among several pieces of legislation.

(b) The lower obligation and expenditure figures have been adjusted to represent only the research funds that were granted to postsecondary institutions (the percentage of the total grant award funds that went to universities and colleges was found, and then applied to obligation and expenditure totals for research in the same year).

(c) Following the suggestion of SRS, this estimated figure was derived by applying the percent FY 72 expenditures were of FY 72 obligations and also the percent of previously obligated but unexpended obligations.

Eligible Applicants:

States, colleges, universities, and other nonprofit institutions. Both profit and nonprofit organizations may be awarded contracts. Grants are not made directly to individuals.

Primary Beneficiaries:

The poor, the handicapped, the aged, children, and youth, as well as institutions and individuals involved in research in these fields.

Available Program Data:

During FY 72, research funded by the SRS was conducted throughout the nation (and in foreign countries, though these funds have not been included here) through six basic agency programs: (1) the minority studies group research which awarded four grants to universities; (2) the special centers program, which awarded 21 grants to colleges and universities; (3) cooperative research and demonstration under Section 1110 of the Social Security Act, which made 22 grants to colleges and universities; (4) the Rehabilitation and Employability program of the Vocational Rehabilitation Division, which made 61 awards to colleges and universities; (5) child welfare grants under Section 426, which made three awards to colleges and universities; and (6) the research and demonstration program conducted by the Administration on Aging, which granted awards to six colleges and universities. Also, the University of Chicago received some research funds in a jointly funded project concerning Graduate Training and Basic Research.

Federal Evaluations/Studies:

No overall evaluations have been done of these programs, beyond individual project reports that granting agencies require.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

102.

DEVELOPMENTAL DISABILITIES--DEMONSTRATION FACILITIES AND TRAINING (UNIVERSITY AFFILIATED FACILITIES) (13.760)

Federal Agency:

HEW: Social and Rehabilitation Service, Division of Developmental Disabilities

Authorizing Legislation:

Vocational Rehabilitation Act, as amended, Section 4(a)(1), P.L. 90-391; U.S.C. 21, Chapter 4; Public Health Service Act, as amended, Section 301-303, P.L. 78-410; 42 U.S.C. 242(a); Developmental Disabilities Services and Facilities Construction Act of 1970

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$4,250,000	$3,982,500	(a)

Program Objectives and Operations:

To fund administration and operation of demonstration facilities and interdisciplinary training programs for personnel needed to render specialized services to persons with developmental disabilities.

The University Affiliated Centers program, through funds from state, local, and several federal sources, provides for the construction of facilities, research, the training of professional personnel, and a variety of services for the developmentally disabled. The Social and Rehabilitation Service provides funds for the salary expenses of administrators and administrative personnel, overhead expenses of new projects, and, in critical cases, the salaries of health faculty.

Eligible Applicants:

Any college, university hospital. other part of an institution of higher learning, or nonprofit organization able to operate such a facility is eligible to apply for designation and federal support as a University Affiliated Facility Center.

(a) There were no expenditures by SRS for the University Affiliated Facilities in FY 72, as the Administrator of the Social and Rehabilitation Service did not authorize the use of the $4,250,000 appropriated funds until June 27, 1972. Between that date and June 30, grant obligations totaling $3,982,500 were made to the 30 various University Affiliated Facility Centers.

Primary Beneficiaries:

University Affiliated Facility (UAF) personnel, professionals and non-professionals, involved with the developmentally disabled as well as individuals having developmental disabilities and their families.

Available Program Data:

During FY 72, the 32 UAF's trained 52,824 persons in a variety of fields, including special education, nursing, pediatrics, and psychology. Approximately 57 percent of the total received short-term (less than eight hours) instruction, and 54 percent of all trainees were receiving degree credits for their efforts.

Federal Evaluations/Studies:

In 1970, the first of a series of studies on the UAF program was completed by Tadashi Mayeda of the University of Ohio for the Social and Rehabilitation Service. This study revealed that a lag had developed between the actual and expected training rate of health personnel, to the degree that 50 percent fewer persons had been trained by 1969 than the original plans had projected. The cause of this lag was thought to be partially a consequence of the original program goals, which emphasized the research and service aspect of the Centers rather than training. Insufficient federal funding, also a result of early financial plans based on the goal of declining center dependency on federal support during the early developmental-construction phase of the UAF program, was also suggested as a cause of the lag.

While recognizing that only the UAF Centers themselves were chiefly responsible for innovative and quality service to their own geographic areas, Mayeda's report suggested that certain actions taken by both the federal government and the UAF's could contribute to the full achievement of the program goals. Consequently, the report continued the following major suggestions for the federal policy concerning the UAF Centers.

1. A direct financial investment of $6,700,000 per annum over five years should be made in each of the 19 centers then operative, these funds to be used primarily to supply federal needs and to fulfill national goals.

2. Incentive grants should be awarded to individual centers for increasing and expanding training efforts.

3. Grants for new UAF Centers should emphasize regionalization, and special awards should be made for centers that develop plans and otherwise make efforts to serve the needs of areas currently without access to such facilities.

The report further suggested that the UAF Centers themselves could improve services in general by the following actions:

1. More time should be devoted to more rigorous and formal planning and evaluations of the training programs so that the health service

manpower needs of each region, as well as of the nation, could be most effectively met.

2. Greater cooperation and coordination among all the UAF's should be sought by defining more specific common goals and by greater sharing of ideas, equipment, and methods. By these actions, the effect of the centers might be increased on a national level, instead of being confined to the immediate surroundings around each center.

3. By examining the specific problems of the developmentally disabled in its particular area, each center should discover and focus its resources and attention on the most critical of these needs.

Further follow-up studies and reports will be forthcoming, the first of which is due to be published in the autumn of 1973.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

28, 99.

COMPREHENSIVE SOCIAL AND REHABILITATION TRAINING (MANPOWER DEVELOPMENT AND TRAINING) (13.758)

Federal Agency:

HEW: Social and Rehabilitation Service, Rehabilitation Services Administration

Authorizing Legislation:

Vocational Rehabilitation Act, Sections 4, 7, and 16, P.L. 83-565; Social Security Act of 1935, as amended, Sections 1110, 1115, 426, and 707; Older Americans Act of 1965, Titles IV and V, P.L. 91-69

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$44,600,000	$37,668,000 PSE $35,649,000(a)	$25,503,000 PSE $24,508,162(a)(b)

Program Objectives and Operations:

To provide grants for training projects and traineeships that hold promise of contributing to solutions of vocational rehabilitation problems; to develop, expand, and improve undergraduate and graduate training for personnel in social work and programs for the aged.

Training grants are awarded by the various components within the Social and Rehabilitation Service (SRS). Programs are funded through direct grants. Grants for social work programs are made to meet part of the cost of graduate and undergraduate training of professional social work personnel, limited to faculty, their supporting personnel, minor facility improvements, and traineeships for persons interested in family and child welfare. Grants are also available for institutions engaged in preparing personnel for leadership and professional positions in programs and services for older persons.

(a) These figures represent the approximate portion of both the obligations and expenditures that were available or spent for postsecondary education. Estimated funds utilized for training that was either inservice or obviously at the secondary level have been eliminated by finding the percentage of funds utilized for all other program or projects--i.e., postsecondary education--and then applying that number to the total obligation and expenditure figures for SRS training in FY 72. Also, obligations and expenditures include $8,000,000 in supplemental funds appropriated to the Administration on Aging in December 1971 with a special six-month extension of the fiscal year (until December 1972) for granting purposes.

(b) Following the suggestion of SRS, this estimated figure was derived by applying the percent FY 72 expenditures were of FY 72 obligations and the percent FY 72 expenditures were of previously obligated but unexpended obligations to the postsecondary portions of the FY 72 obligations and the previously obligated amounts.

Eligible Applicants:

Colleges, universities and other educational institutions are eligible for vocational rehabilitation and aging funds grants, and are the sole eligibles for social welfare training grants. State agencies and other public or nonprofit organizations may be considered for vocational rehabilitation funds grants, while any institutions serving the needs of the elderly are available for training awards from aging funds.

Primary Beneficiaries:

Individuals receiving traineeships as well as the institutions receiving grants.

Available Program Data:

During FY 72, 15,638 people received training of some kind through one of the training programs administered by SRS. Of these, the great majority, (14,081) were trained in some aspect of vocational rehabilitation, while 755 received instruction in the field of social work, and 802 trained to work with the elderly.

Universities received the majority of the grant awards in FY 72, as 81 percent of the 618 active grants were to universities, while all 61 of the new grants for FY 72 were to the same type of recipient. The Administration on Aging made 40 new grants during FY 72, and the first part of FY 73 with supplemental funds (these funds had a special six-month extension of the fiscal year award period).

Federal Evaluations/Studies:

In 1970 the Senate Appropriations Committee directed the Administrator of SRS to contract to conduct a study of the training grant program of the agency. Consequently, a private firm, Socio-technical Systems Associates, undertook such a study utilizing program literature (files, data, etc.), interviews with state and federal program administrators, teaching staff, and professional educators, and a survey of over 400 educators and employers in the field of rehabilitation as the basic informational sources. In presenting preliminary findings, the researchers recognized that: (1) the rehabilitation training program was intended to serve as a major resource upon which all rehabilitation agencies, public and private, could draw; (2) despite the federal aid program, rehabilitation manpower needs substantially exceeded current and projected supply of trained personnel.

The report preliminarily identified the basic issues involved in developing future plans for the training program, ranging from broad organizational problems to specifics concerning the type of grant. The conclusion from the discussion of these issues was that the focus of federal aid should be on the higher educational academic-orientated types of training. Teaching grants and graduate fellowships, for example, were recommended as specific types of aid, while undergraduate and short-term training were regarded as areas of secondary concern for manpower needs. Moreover, preliminary recommendations were that training at the master's level serve as the basic training model for most disciplines.

Organizationally, a more centralized administration was seen as a basic requirement for training purposes. In particular, the necessity of centralized planning and evaluation was emphasized as the best means to provide a view on a national scale of training needs and resources in relation to overall rehabilitation services.

Also included in the summary was a review of the specific training fields such as speech pathology and audiology, social work, rehabilitation of the deaf, and others.

The Administration on Aging has recently reviewed an evaluation of the Older Americans Act, Title V Traineeship Grant Program, a study conducted by Joy Ketron, Inc., under contract with SRS. This study evaluates training programs administered by the Administration on Aging in terms of the proportion of trainees (receiving grants under Title V) that actually found employment in the field of gerontology upon graduation. The basic data source was a questionnaire mailed to former recipients of traineeships, both graduates and nongraduates. Schools which furnished such training were also asked to report on their programs. Personnel at the Administration on Aging report that the study will contain analysis based on questionnaire statistics as well as a review of the reports received from the institutions. Plans for publication are currently uncertain.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

35.

DEVELOPMENTAL DISABILITIES--SPECIAL PROJECTS (13.759)

Federal Agency:

HEW: Social and Rehabilitation Service, Rehabilitation Services Administration

Authorizing Legislation:

Vocational Rehabilitation Act, as amended, Section 4(a)(1), P.L. 90-391; U.S.C. 21 Chapter 4; Public Health Service Act, as amended, section 301-303, P.L. 78-410; 42 U.S.C. 242(a); Developmental Disabilities Services and Facilities Construction Act of 1970

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$23,575,000	\$18,506,000 (a) \$ 2,706,000 (b)	\$18,031,000 (a) \$ 2,637,000 (b)

Program Objectives and Operations:

To provide partial support for services and training, salaries of professional/technical personnel, and support for innovative projects designed to improve habilitation and rehabilitation of the developmentally disabled.

The Rehabilitation Service Administration makes available federal funds through a number of programs (such as the Initial Staffing Grants Program, Projects Grants for the Rehabilitation of the Mentally Retarded, and others) for varied projects which promote the situation of the developmentally disabled. Those grants may be used for the expenses of personnel, equipment, travel, supplies, and for the salaries of instructors of the student work experience programs. Initial staffing grants, with restrictions, may be provided for the salaries and other personnel costs for the developmentally disabled.

(a) These figures represent actual obligations and estimated expenditures for only those three special project programs (Mental Retardation Staffing of Community Facilities, Mental Retardation Service Project Grants, and Training Project Grants for Rehabilitation of the Mentally Retarded) which either provided training or awarded funds to universities in FY 72.

(b) These figures are estimates of funds obligated and expended for postsecondary education in FY 72 under the three special project programs referred to above. The percent of total grant obligations represented by funds going to universities and for training other than inservice programs was found and that number applied to total program expenditures.

Eligible Applicants:

States, political subdivisions of states, and other nonprofit organizations or public agencies.

Primary Beneficiaries:

Professional and nonprofessional personnel who work or plan to work with the developmentally disabled, as well as those persons who have developmental disabilities.

Available Program Data:

During FY 72, federal funds financed training (not including inservice training) both for the developmentally disabled and for community workers involved with developmentally disabled persons. In that year, approximately $635,000 was obligated to 16 projects providing vocational rehabilitation at sheltered centers for the severely disabled, while $1,895,655 in federal funds financed the 61 short-term training projects at the local level which trained some 1,500 persons.

In addition, a number of awards were made to universities or colleges for various services or projects, ranging from staffing awards for institutions with developmental disability centers to grants for evaluations, consultation services, or assessment systems.

Federal Evaluations/Studies:

No evaluations dealing directly with these programs have been undertaken.

REHABILITATION SERVICES AND FACILITIES--BASIC SUPPORT (13.746)

Federal Agency;

HEW: Social and Rehabilitation Service, Rehabilitation Services Administration

Authorizing Legislation:

Vocational Rehabilitation Act, as amended; 20 U.S.C. chapter 4, (Randolph-Sheppard Act); 20 U.S.C. chapter 6A and 29 U.S.C. 32 and 41

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
\$580,000,000 (a)	\$123,878,000 (b)	\$118,107,000 (b)

Program Objectives and Operations:

To provide vocational rehabilitation services to persons with mental and physical handicaps.

Federal and state funds are used to cover the costs of providing a wide variety of rehabilitation services through annual federal formula grants. The ultimate goal of aid and assistance provided by this program is the rehabilitation of the disabled individual (considered successful employment for 30 days or more) which will permit him to engage in a gainful occupation.

Eligible Applicants:

State agencies designated as the sole state agency to administer the vocational rehabilitation program.

Primary Beneficiaries:

Individuals with physical or mental disabilities which present a substantial handicap to employment, but who may be reasonably expected to achieve a position of gainful productivity with the provision of vocational rehabilitation services.

(a) Authorization figure is for the federal share of the Basic States Grants Program for Vocational Rehabilitation, which provides training as one of many services.

(b) Both obligations and expenditures have been adjusted to approximate the percentage of the total budget of the Rehabilitation Service Administration utilized for postsecondary education.

Available Program Data:

The State-Federal Basic Support Program is the chief vehicle by which the Rehabilitation Services Administration provides services for people disabled by mental retardation, mental illness, alcoholism, drug addiction, amputations and other orthotic impairments, speech and hearing disorders, blindness, deafness, and many others. Among a wide variety of services, funds are utilized for all types of training at all levels (from elementary to university) for disabled individuals as well as providing for such things as reader services for the blind and interpreter services for the deaf.

In FY 72, over 340,000 individuals received some form of postsecondary training as a consequence of over $118,000,000 expended for the purpose by the federal government. Of that number, almost 45 percent were attending colleges or universities, while smaller numbers trained at vocational schools or received on-job or personal adjustment training (such as braille instruction for the blind). The average cost per individual for all such training in that year was approximately $450.

Statistics for FY 72 also show that of the 326,138 individuals receiving services who were successfully rehabilitated, 115,853 had previously received postsecondary training, the majority of which was either for personal or vocational adjustment.(c) Over 25 percent of these trained rehabilitated individuals had attended colleges and universities.

Federal Evaluations/Studies:

A 1969 study of the vocational rehabilitation program was carried out by Ronald Conley, using a benefit-cost analysis approach. Considering employment earnings as a measure of increased social benefit, estimates and projections were made of the undiscounted increased earnings in FY 67 and subsequent years that resulted from rehabilitation. Cost estimates were also made and the figures compared. Findings (admittedly rough estimates but based, as the author notes, on conservative assumptions) indicate that every dollar spent on rehabilitation actually returns five dollars in social benefits. Furthermore, if tax gains from the increased earnings of the rehabilitants are also considered (besides increased taxes paid, the reduction in tax costs for the necessary care of the disabled are also included in this estimate), the author suggests the social benefits might increase by another 25 percent.

To complete his study, Conley examines the social benefits according to type of trainee on whom each rehabilitation dollar was spent. The somewhat surprising suggestion of these estimates is that rehabilitation money spent on those less easily rehabilitated is as socially beneficial as that spent on young, white, male disabled with less serious disabilities (i.e., those who are most easily and most likely to be rehabilitated).

(c) The Social Rehabilitation Service defines personal adjustment or vocational training as any type of instruction that contributes to the employability of the disabled individual.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

13, 100, 101.

REHABILITATION SERVICES AND FACILITIES--SPECIAL PROJECTS (13.763)

Federal Agency:

HEW: Social and Rehabilitation Service, Rehabilitation Service Administration

Authorizing Legislation:

Vocational Rehabilitation Act of 1965, as amended, Sections 4(a)(1) and 4 (a)(2) (A)-(D), Sections 12 and 13; P.L. 89-333; 29 U.S.C. 4, 34, 41(6)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$57,761,000	$57,105,365	$33,821,999
	PSE $12,412,407[a]	PSE $ 8,986,085[a]

Program Objectives and Operations:

To provide funds to state vocational rehabilitation agencies and related institutions for the expansion and improvement of services for the mentally and physically handicapped over and above those provided by the Basic Support Program (administered by the states).

Through a number of different and varied programs this Special Projects program provides training for individuals or awards to postsecondary institutions. Training may be provided through the award of grants to industries for the training of the handicapped within their plants, to agencies or organizations to develop new career training programs for the handicapped, or for other costs directly related to training, including training allowances. Grantees may also be provided with facilities to assist them to improve their operations or to otherwise improve services for the handicapped. Awards are made only for projects which contribute substantially to the solution of problems (particularly those of employment) common to the handicapped.

Eligible Applicants:

Nonprofit institutions, organizations, or state agencies.

Primary Beneficiaries:

Physically or mentally handicapped persons.

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[a] This estimated figure was derived from calculating the postsecondary education percentage of the total award amount and applying that same percentage to the total obligation and expenditure amounts.

Available Program Data:

Of the 22 new career projects funded in FY 72, five were at colleges or universities. A total of 558 persons were trained, 129 of them at universities. Funds for expansion of services were granted to three postsecondary institutions for projects including: Comprehensive services for the deaf, establishment of a clinical appliance manufacturing facility, and a rural and a farm family rehabilitation project. An additional 12 projects which supported training received expansion funds.

In addition, there were 10 projects with Industry Training programs. The number of persons trained in this program is unavailable. Approximately six of the 197 Facility Improvement Grants went to postsecondary institutions.

There were 54 Training Services programs which received funds during FY 72, 45 of which were in operation for the entire year. The following statistics concern these Training Service programs. In FY 72, 4,836 persons entered the training programs. (The number of continuing trainees is unavailable.) A total of 1,627 of the new and continuing enrollees dropped out of the program. Of the 1,873 trainees who were placed in competitive employment, 728 were welfare recipients. An additional 247 enrollees were placed in full-time sheltered employment. Of this group, 97 were welfare recipients. At the close of FY 72, 3,381 trainees were active in the program. Enrollees received training allowances of $25 per week plus $10 per each dependent up to a maximum of $65 per week, the average being $35-40 per week. Enrollees received a total of $2,376,000 in training allowances in FY 72.

Federal Evaluations/Studies:

Socio-Technical Systems Associates (STSA) have done a study of the Training Grant Program. Data were obtained from approximately 100 interviews with state departments of vocational rehabilitation and other employers, review of literature on training and manpower programs, and discussions with present and past RSA and SRS training and manpower development staff as well as STSA consultants.

The study found a gap between training supply and demand. Projection for 1973 indicated a widening of the gap to an estimated need for 27,000 replacements or new positions.

Recommendations included improving the quality of the training projects even if, in some cases, a temporary reduction in the quantitative output of personnel resulted. It was suggested that support of quality faculty through teaching grants should take precedence over traineeships. Along with a reduction in student stipends, the study recommended a contractual commitment of students receiving assistance to work in the rehabilitation field upon graduation from the training program. Loan write-offs for other students were also suggested.

The report indicated a need for the RSA grant program to continue to fund a limited number of undergraduate programs spread among geographical regions.

Master's level training should remain as the basic model training in most disciplines. The study found that only a limited number of high quality doctoral programs are needed.

The best method of administration of the training grant program was found to be central office control, because of the size and complexity of the many projects funded and disciplines involved.

In the field of rehabilitation counseling, consideration of a career ladder approach was suggested. Under this system, untrained college graduates would enter a rehabilitation facility on a lower career level and through inservice training and gradual postentry graduate work, rise to full-fledged counselor positions. Since master's level counselors would be needed to supervise counselors with bachelors' or associate degrees, the report recommended that the master's level program be maintained at its present level. Also recommended was the existence of at least one doctoral program in each of the ten regions of RSA.

Continued support at the present funding level was recommended for the Physical Medicine and Rehabilitation programs, Rehabilitation Nursing, Recreation for the Ill and Disabled, and Undergraduate Education. Since other federal programs have been authorized to fund training in occupational therapy, physical therapy, social work, speech pathology, and audiology, RSA funding should be adjusted or phased out according to the funding adequacy of the other programs.

In the prosthetics and orthotics discipline, continued support was recommended, with an emphasis on traineeships coupled with encouragement of an assumption of teaching costs by the universities.

Maintenance or expansion of funding levels was recommended for the following programs: Rehabilitation of the Deaf, Rehabilitation of the Blind, and Rehabilitation Facilities Administration.

Further study to ascertain the manpower needs in the Mental Retardation field was recommended. For the present, funding of this discipline was not recommended to be expanded.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

35.

VOCATIONAL REHABILITATION SERVICES FOR SOCIAL SECURITY DISABILITY BENEFICIARIES (TRUST FUND REHABILITATION PROGRAM) (13.747)

Federal Agency:

HEW: Social and Rehabilitation Service, Rehabilitation Service Administration

Authorizing Legislation:

Social Security Act as amended in 1965, Section 222(d), as added by Section 336 of P.L. 89-97, 79 Stat. 408-409; 42 U.S.C. 422(D)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$6,891,000(b)	$6,878,784(b)

Program Objectives and Operations:

To provide necessary rehabilitation services to disability beneficiaries to enable their return to gainful employment.

Social Security trust fund money is available to pay the cost of providing vocational rehabilitation services to selected disability insurance beneficiaries. These services are provided by the state agencies, as a part of the Rehabilitation Service Administration's basic support program, although there are no state matching requirements.

Eligible Applicants:

States operating under a state plan approved under Section 5 of the Vocational Rehabilitation Act. If a state should have no amended state plan, other public or private agencies, organizations, institutions, or individuals may be designated as eligible by the Secretary of Health, Education, and Welfare.

Primary Beneficiaries:

Disabled persons receiving Social Security Disability Insurance benefits for whom it is determined that there exists the vocational rehabilitation potential to permit a return to gainful employment.

(a) Does not apply, as this money is transferred from the Social Security trust fund.

(b) Obligation figure is an estimate of the funds obligated in that year for rehabilitation training. Total program obligation in that year was $30,445,000. Expenditure figure is also for training only.

Available Program Data:

In FY 72, $6,878,784 in trust fund money was used to provide a variety of training for disabled beneficiaries.

No data are available as to the numbers of such persons actually receiving training as a consequence of trust fund expenditure. However, personnel at the Rehabilitation Services Administration report that among case closures in FY 72, 7,827 individuals, or 50.5 percent of the total number of closures, had received training as part of their vocational rehabilitation (these figures include both rehabilitated closures and non-rehabilitated closures). If this percentage is considered to also apply for all active trust fund cases, then approximately 13,500 to 14,000 persons were receiving training during any given quarter in FY 72 as a result of trust fund grants.

Federal Evaluations/Studies:

No evaluations of this method of financing vocational rehabilitation and training have been undertaken. An abstract of an analysis of financial social benefits of the vocational rehabilitation basic support program, (the vehicle by which trust fund money provides rehabilitation services) may be found in the Basic Support Program entry, p. 467.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

101.

YOUTH DEVELOPMENT AND DELINQUENCY PREVENTION (13.764)

Federal Agency:

HEW: (Social and Rehabilitation Service), Office of Human Development(a)

Authorizing Legislation:

Juvenile Delinquency Prevention and Control of 1968, Titles I, II, III, P.L. 90-445; 42 U.S.C. 3801-3890

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$9,987,000 $1,118,000(b)	$11,612,000 $ 2,403,000(b)

Program Objectives and Operations:

To increase the competence of state and local agencies in juvenile delinquency prevention and control.

The federal government may fund (up to 100 percent) any projects which provide training for personnel already employed or seeking employment to work with youth. Grants are made to nonprofit organizations which develop and administer such programs.

Eligible Applicants:

Federal, state, local, public or private nonprofit organizations or agencies. Private organizations must have been in existence for at least two years prior to application for the grant.

Primary Beneficiaries:

Individuals who work, or plan to work, with youth.

Available Program Data:

In FY 72, approximately 3,000 individuals received training at ten nonprofit institutions (two of which were universities) in locations throughout the nation. Most grants were for the administration of short-term training programs lasting only a few days. In that year, $760,000 in Youth Development and Delinquency Prevention Administration funds were obligated (and over $1,940,000 actually expended) for training purposes. In the same year, another $418,000 was obligated (with expenditures of an estimated $450,000) to universities for a variety of projects ranging from evaluation services to local delinquency prevention programs.

(a) Until May 1973, this program's predecessor agency was the Youth Development and Delinquency Prevention Administration and was located in the Social and Rehabilitation Service.

(b) These figures are estimates of the amount of funds obligated and expended for postsecondary education. Obligations represent all grant awards under Title II plus additional grant awards under Title I and III received by universities. Expenditures have been estimated by finding the percent of total obligations, represented by such postsecondary obligations, and then applying that percentage to total FY 72 expenditures.

Agency personnel report that the training program is not currently operative.

Federal Evaluations/Studies:

No overall evaluations have been done of this program.

SOCIAL SECURITY--DISABILITY INSURANCE (13.802)

Federal Agency:

HEW: Social Security Administration

Authorizing Legislation:

Social Security Act of 1935, as amended; P.L. 74-271; 42 U.S.C. 401-429

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	$42,970,000(b)

Program Objectives and Operations:

To replace part of the income lost because of a physical or mental impairment severe enough to prevent a person from working.

Children of disabled parent(s) are entitled to receive Social Security student benefits for any month in which the child is between 18 and 22 years old and enrolled as a full-time student at an approved institution. Benefits are normally received through the parent(s) or guardian but may, upon special request, be sent directly to the student and will continue to be sent even if the parent(s) should become ineligible for benefits. Student earnings below a $1,680 limit per year will not affect benefits as long as full-time student status is retained (benefit dollars are withheld according to a benefit formula based upon the amount by which earnings exceed the $1,680 limit).

Beginning September 1972, there was a 20 percent increase in all Social Security benefits. The $1,680 earnings limit was also raised to $2,100 for 1973.

Eligible Applicants:

Full-time students between the ages of 18 and 22 attending government-operated vocational schools or accredited postsecondary or secondary institutions, public or private.

(a) Authorization and obligation data do not apply for Social Security disability, survivor, or retirement programs as benefits are paid from trust funds.

(b) Since the Social Security Administration does not distinguish between secondary and postsecondary student beneficiaries in its available annual data, the figure given is an estimate based upon actual FY 72 data and the percentage figures of a 1969 sample survey of student beneficiaries (see below for reference).

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In December 1971 (Social Security personnel suggest that data from this month are more representative of the program than estimates of annual totals), 85,424 student disability beneficiaries received benefit payments that averaged $59.

Preliminary data from a 1969 sample survey of Social Security student beneficiaries(c) indicate that only 13.7 percent of this group are eligible because of the disability of a parent (the other 86.0 percent being eligible because of parent(s) retirement or death). The survey also showed that of those students receiving disability insurance benefits, 60.0 percent were in colleges, and 8.5 percent in some type of postsecondary vocational-technical training programs. The age of the beneficiaries affects these percentages. While only 53.5 percent of the 18-year-old beneficiaries were in postsecondary programs, 95.5 percent of the 21-year-olds were training at that level. If race is considered, the percentages also vary (though to a lesser degree than when the same percentages for all three groups of students beneficiaries, secondary included, are considered); 70.0 percent of whites, compared to 64.0 percent of nonwhites, were training at the postsecondary level.

Federal Evaluations/Studies:

As of July 1973, no evaluations have been completed analyzing the effectiveness of student aid under this program. However, a study is currently being conducted by the Division of Retirement and Survivor Studies of the Office of Research and Statistics, Social Security Administration.

Although this study began as a complete evaluation, budgetary limitations have forced a reduction of the scope of the study from an examination of both former and current student beneficiaries to only the latter group. The study currently plans to provide the following information:

1) a description of the socioeconomic and demographic characteristics of student beneficiaries and their aims and attitudes;

2) comparisons of this group with other population groups with emphasis on the student's earnings, family contributions, scholarships and loans, and courses of study;

(c) Barbara Kirsch, Variations in School Attendance Patterns of Student Beneficiaries, Social Security Administration Research and Statistical Note #10,1971 (Washington: Government Printing Office, 1971).

3) an analysis of why some beneficiaries are in or planning on a particular type of school in terms of socioeconomic background, career expectations, and benefit levels; and

4) an evaluation of the following specific Social Security program questions:

   a) does the age 22 limitation allow beneficiaries to complete their education or training?

   b) how does the earnings test affect the student?

   c) does the concept of dependency differ for young persons over age 18 while attending school from that for children under age 18?

   d) how does the benefit level and whether or not the student is a survivor or the child of living beneficiary affect his or her action?

The results of this study will be published as a series of analytical reports, the first of which is expected in FY 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

103, 104, 105, 106.

SOCIAL SECURITY--RETIREMENT INSURANCE (13.803)

Federal Agency:

HEW: Social Security Administration

Authorizing Legislation:

Social Security Act of 1935, as amended; P.L. 74-271; 42 U.S.C. 401-429

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	$58,876,000[b]

Program Objectives and Operations:

To replace income lost because of retirement. Children of retired parent(s) are entitled to receive Social Security student benefits for any month in which the child is between 18 and 22 years old and enrolled as a full-time student at an approved institution. Benefits are received through the parent(s) or guardian but may, upon special request, be sent directly to the student. Payments will continue even if the parent(s) should become ineligible for benefits.

The amount of the monthly payment is dependent upon the amount the worker (the parent or parents) earned before retirement. Student earnings during the eligibility period, however, may affect benefit payments if the student earns more than $1,680 in any one year. (Benefit dollars are withheld according to a benefit formula based upon the amount by which earnings exceed the $1,680 limit.)

Beginning September 1972, there was a 20 percent increase in all Social Security benefits. The $1,680 earnings limit was also raised to $2,100 for 1973.

Eligible Applicants:

Full-time students between the ages of 18 and 22 attending public or private secondary schools or postsecondary institutions.

(a) Benefits are paid out of a trust fund; so authorization and obligation figures do not apply to the Social Security disability, retirement, or survivor programs.

[b] As the Social Security Administration does not distinguish between secondary and postsecondary student beneficiaries in its annual statistical reports, this figure is an approximation utilizing actual FY 72 payment data and then applying percentages obtained from a 1969 sample survey. (See footnote c.)

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In December 1971 (Social Security personnel suggest that data from this month are more representatiave of the program than estimates of annual totals), 98,566 student retirement beneficiaries received benefit payments that averaged $66.

According to a 1969 sample group survey by the Social Security Administration,(c) 75.7 percent of the students receiving retirement benefits were training beyond the high school level, either in colleges, or else in vocational-technical institutes. Both the factors of race and age affect the above percentage; however, of the 18-year-old retirement beneficiaries, only 56.3 percent are students beyond the secondary level, as compared to 97.4 percent of those 21-year-old beneficiaries training at a similar level. Whites account for 85.5 percent of all student beneficiaries and show higher percentages of postsecondary students at all levels of instruction.

Federal Evaluations/Studies:

A study of the student beneficiaries under the Social Security Retirement Insurance program is currently being conducted by the Division of Retirement and Survivor Studies of the Social Security Administration. A description of this study may be found under the evaluation category of the Social Security Disability Insurance entry on p. 477.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

103, 104, 105, 106.

(c) Barbara Kirsch, Variations in School Attendance Patterns of Student Beneficiaries, Social Security Administration Research and Statistical Note #10,1971 (Washington: Government Printing Office, 1971).

SOCIAL SECURITY--SURVIVORS INSURANCE (13.805)

Federal Agency:

HEW: Social Security Administration

Authorizing Legislation:

Social Security Act of 1935, as amended; Public Law 74-271; 42 U.S.C. 401-424

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	$373,460,000[b]

Program Objectives and Operations:

To replace income lost to dependents because of worker's death. Children of deceased parent(s) are entitled to receive Social Security student benefits for any month in which the child is between 18 and 22 years old and enrolled as a full-time student at an approved institution. Benefits are received through parent or guardian but may, upon special request, be sent directly to the student and will continue to be sent even if the parent should become ineligible for benefits. Student earnings below $1,680 for each year will not affect benefits as long as full-time status is maintained. (Benefit dollars are withheld according to a benefit formula based upon the amount by which earnings exceed the $1,680 limit.)

Beginning September 1972, there was a 20 percent increase in all Social Security benefits. The $1,680 earnings limit was also raised to $2,100 for 1973.

Eligible Applicants:

Full-time students between the ages of 18 and 22 who are attending public or private high schools or accredited postsecondary institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) There are no authorization or obligation figures for Social Security disability, retirement, or survivor programs as benefits are paid out of trust funds.

(b) Since the Social Security Administration does not distinguish between secondary and postsecondary student beneficiaries in its available annual data, this figure is an estimate based upon actual FY 72 data and the results of a 1969 sample survey of student beneficiaries. (See footnote c.)

Available Program Data:

In December 1971 (Social Security personnel suggest that data from this month is more representative of the program than estimates of annual total), 339,446 white students and 60,500 nonwhite students received survivors benefits. In that month, the average benefit payment ranged from $80 for nonwhite students to $109 for white students. (These figures could not be adjusted for postsecondary education only.)

For all three types of over-18 student eligibles (because of parent's retirement, disability, or death), a 1969 sample survey(c) shows that a majority, 68.3 percent, received benefits as survivors. Of these groups, 74.8 percent were postsecondary students (8.0 percent of whom were in vocational or technical programs). Eligible postsecondary beneficiaries were more likely to be older (56.0 percent of 18-year-olds in postsecondary programs, as compared to 95.0 percent of the 21-year-olds) and white rather than non-white (70.0 percent in college and 7.8 percent in vocational-technical training for whites, while only 47.0 percent of other races were in college, and 10.0 percent in vocational or technical programs).

No figures are available as to the number receiving benefits as survivors according to race, but they are estimated to be close to the survey findings for all student beneficiaries (85.5 percent white, 14.5 percent black or other.)

Federal Evaluations/Studies:

A study of the student beneficiaries under the Social Security Survivors Insurance program is currently being conducted by the Division of Retirement and Survivor Studies of the Social Security Administration. A description of this study may be found under the evaluation category of the Social Security Disability Insurance entry on p. 477.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

103, 104, 105, 106.

(c) Barbara Kirsch, Variations in School Attendance Patterns of Student Beneficiaries, Social Security Administration Research and Statistical Note #10,1971 (Washington: Government Printing Office, 1971).

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT (HUD)

MODEL CITIES SUPPLEMENTAL GRANTS (MODEL CITIES) (14.300)

Federal Agency:

HUD: Community Development

Authorizing Legislation:

Demonstration Cities and Metropolitan Development Act of 1966, Title I as amended, P.L. 89-754; 42 U.S.C. 3301

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$888,000,000[a]	PSE $47,400,000[b]	PSE $40,800,000[b]

Program Objectives and Operations:

To provide financial and technical assistance to cities to help them plan, develop, and carry out locally prepared and scheduled programs for dealing with the problems of urban poverty and blight.

Supplemental grants may be used for administrative costs related to the implementation of an approved Model Cities program. Funds may not be used for costs related to general administration of local government or to replace nonfederal contributions obligated to projects or activities prior to the time the city applied for Model Cities planning grant. Monetary assistance is available in yearly program increments. There are formula and matching requirements for allocating funds.

Eligible Applicants:

Any municipality, county, or other public body having general government powers (or two or more public bodies jointly). The program is limited to 150 cities which have already been selected.

Primary Beneficiaries:

Neighborhood residents, organizations, and other groups providing services or assistance to a blighted target area (model neighborhood) located within a model city.

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[a] Balance of cumulative authorization made for the period 1968-72.

[b] Estimate of funds that benefited postsecondary education purposes, including adult, higher, and vocational education.

Available Program Data:

Available data from HUD is limited because the Model Cities program provides basically block grants by which a city (or county) demonstration agency, (the local administrating authority for such funds) may choose on its own the various areas such as education, health services or economic development to support.

The Model Cities program was proposed by HUD to terminate June 30, 1973. During FY 74 no additional grant obligations are to be incurred. FY 73 funds are proposed to be administrered in a manner that maintains the administrative capability of local bodies throughout the year, so that, if they so desire, communities can continue these programs under Urban Community Development Revenue Sharing.

Federal Evaluations/Studies:

No evaluations specifically concerning any postsecondary education activities supported by the Model Cities Program are available out of the central HUD office.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

107, 109, 110.

COMMUNITY DEVELOPMENT TRAINING GRANTS (TITLE VIII) (14.202)

Federal Agency:

HUD: Community Planning and Management

Authorizing Legislation:

Housing Act of 1964, Title VIII, Section 803, as amended, P.L. 91-152, 78 Stat. 802; 20 U.S.C. 801

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$17,500,000[a]	$2,999,000[b]	$2,802,000[b]

Program Objectives and Operations:

To help states develop or expand programs that provide skills needed for community development to technical, professional, or subprofessional personnel at state and local levels.

This program assists in developing training programs for employees of state and local governments, public agencies, or private nonprofit organizations with a community development responsibility, and for persons soon to be employees of such agencies. Grants are made on an annual basis. There are formula and matching requirements.

Eligible Applicants:

States, U.S. territories, and the District of Columbia.

Primary Beneficiaries:

Trainees must be employed, or training to be employed, by an eligible governmental or public body responsible for community development or by an eligible nonprofit organization conducting housing and community development programs.

(a) The Housing Act of 1964, as amended, authorized $30 million for grants described herein and fellowships described on p. 488 without fiscal year limitation. This amount is the balance of that authorization at the start of FY 72.

(b) Obligations and expenditures for Community Development Training Grants and Technical Assistance, Studies, and Publications. Postsecondary education funds for the Technical Assistance Studies and Publications Program are negligible.

Activities eligible under the program are: inservice training; preservice training including internships, program development training, and field work programs; and program development activities related to the development of manpower training programs.

Available Program Data:

An estimated 46,000 individuals were trained under this program in FY 72. Of this total, 26,800 were estimated to be in the professional and technical program and 19,200 in the subprofessional portion of the program.

Training grants were negotiated in 49 states to provide training in the following categories: (1) public administration; (2) housing production and management; (3) social and community development; (4) community planning; (5) urban affairs; (6) codes and zoning; and (7) other.

According to the Department, this program was terminated on June 30, 1973. Training and education assistance, however, will continue to be available under other federal programs.

A part of the community development programs is the Technical Assistance, Studies, and Publication Program authorized by Section 805 of the Title VIII legislation, as amended. A recent emphasis in the program has been in developing "training packages" for state and local government use. In FY 72, 25 projects were supported with $931,000. Through this program the Department is authorized to undertake technical assistance and studies aiding states, local governments, or public bodies in developing and evaluating effective training plans and programs.

Federal Evaluations/Studies:

No evaluations of these programs were available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

108, 109, 110.

URBAN STUDIES FELLOWSHIPS (14.217)

Federal Agency:

HUD: Community Planning and Management

Authorizing Legislation:

Section 802(a), Title VIII Housing Act of 1964 as amended; Urban Studies Fellowship Program

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$17,500,000(a)	$500,000(b)	$392,800(b)

Program Objectives and Operations:

To attract the most capable persons to the expanding field of urban development in response to a critical national need for trained urban practitioners.

Awards are made for graduate degree programs in accredited universities in fields such as urban and regional planning, urban affairs, urban public administration, urban sociology, urban economics, and similar programs oriented to public service careers in urban affairs. Programs must be academically accredited and located in the United States, Puerto Rico, or its overseas possessions. Grants are normally not offered for professional studies in law, engineering, or other fields, except when the program has a definite urban aspect, and then only for the final year of study (senior year) and/or for an LL.M. or M.S./M.A. degree. HUD will not support individuals planning to complete doctorates or individuals enrolled or enrolling in doctoral programs. Length of assistance (renewable) is one academic year. There are no formula or matching requirements.

Eligible Applicants:

Students are who have applied for, have been accepted to or enrolled in full-time study as candidates for a master's degree in an eligible program. Applicants must be (1) U.S. citizens or (2) non-citizens who have applied for U.S. citizenship or have obtained a permanent residence visa.

(a) The Housing Act of 1964, as amended, authorized $30 million for these fellowships and for training grants (p. 486) with fiscal year limitation. This amount is the balance of that authorization at the start of FY 72.

(b) Obligations and expenditures for Urban Fellowships. The estimated expenditure figure applies only to Urban Fellowships and was derived from calculating the fellowship percentage of the total obligation amount and applying that same percentage to the total expenditure amount.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 104 fellowships were supported by awards totaling $500,000 received at 50 universities and colleges in 30 states.

Fellows included 67 minority group members and 49 women. The number of fellows in the field of planning was 48; in public administration, 20; in urban studies, 17; and five in each of the fields of community organization and sociology, urban law, and urban design. Four other fellows were involved in other fields.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

108.

HOUSING FOR EDUCATIONAL INSTITUTIONS (COLLEGE HOUSING) (14.100)

Federal Agency:

HUD: Housing Production and Mortgage Credit/FHA

Authorizing Legislation:

Housing Act of 1950, as amended, Title IV, P.L. 81-475, 64 Stat. 48; 12 U.S.C. 1749

	FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Debt Services	$ 12,000,000(a)	$ 2,761,000	$ 2,446,000
Direct Loans	$2,074,415,000(b)	$97,247,000	$37,056,000

Program Objectives and Operations:

To help eligible colleges and hospitals finance construction or purchase of housing and related facilities that students can afford.

Grants may be made for periods not to exceed 40 years in an amount equal to the difference in the average debt service required on a loan secured on the private market and the average annual debt service which would have been required if the loan were made at the 3-percent rate applicable to the direct federal loan program.

Direct HUD 3-percent loans will be available only to institutions unable to borrow in the private market at reasonable rates. Facilities eligible for construction or purchase include college residence halls, faculty and married student housing, dining facilities, college unions, infirmaries, and housing for student nurses, interns and residents. Competition for construction contracts is required. Each institution must develop its own plans, subject to local zoning and building codes. Grants are made according to a formula based on an annual contribution for debt service. There are no matching requirements.

(a) Funds for the Debt Service Grant mechanism of the program which are the balance of authorization available for FY 72 out of a cumulative total of $38,300,000.

(b) Balance of direct loan authorization available for FY 72 out of a cumulative total of $5,975,000,000. This represents total authorization minus cumulative net reservations through 1971.

Eligible Applicants:

Public or private nonprofit colleges and universities offering at least a two-year program acceptable for full credit toward a bachelor's degree and public or private nonprofit hospitals operating nursing schools or internship and resident programs.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, the Debt Service Grant and Loan Programs helped provide for a total of 200 projects at public and private two- and four-year colleges. Grants supported 53 of these projects, and loans assisted 147 projects. At private colleges, 91 projects were assisted (seven at two-year and 84 at four-year schools including a nonprofit housing corporation and two student cooperatives funded privately but built at state colleges). At public colleges, 109 projects (25 at two-year and 84 at four-year institutions) were assisted.

At least eight different types of projects were funded: 61 student union projects; 19 married student apartments; nine mixed married student apartments, single students, and faculty; ten single student housing with dining facilities; three infirmaries; one faculty housing; 24 second funding of prior year projects; and 73 single student housing.

According to the department, the College Housing Program was terminated January 5, 1973, and no additional loan or grant commitments are proposed for 1974.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

109, 110.

GENERAL RESEARCH AND TECHNOLOGY ACTIVITY (14.506)

Federal Agency:

HUD: Office of Policy Development and Research

Authorizing Legislation:

Housing Act of 1970, Title V

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$42,931,000 PSE $ 779,278(a)	$42,392,000 PSE $ 763,056(a)

Program Objectives and Operations:

To promote research projects including experiments, demonstration, and pilot programs; and to provide information and mechanisms for improving federal programs and solutions to deal with housing and community problems through state and local governments and nonprofit institutions.

Funds are provided for research projects consistent with the need of the Department of Housing and Urban Development. Research relating to housing to meet national needs, preventing the spread of urban blight and neighborhood decay, improving the environment, improving the management and planning of state of local governments, and analysis of urban growth and development are eligible areas for award of contracts or grants. Contracts or grants are available to state and local governments, industry, and nonprofit institutions. Length of assistance is specified in the contractual agreement. In regard to formula and matching stipulations, contracts may be either cost-reimbursable or fixed-price in nature. Grants may provide up to 100 percent of funding, although cost-sharing is encouraged.

Eligible Applicants:

Public and/or private profit and nonprofit organizations which have authority and capacity to carry out projects.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived from calculating the postsecondary education percentage of the total obligation amount and applying that same percentage to the total expenditure amount.

Available Program Data:

In FY 72, eight contracts were made with academic educational institutions. The Massachusetts Institute of Technology received $95,750 for research involving the mobile home industry and $34,365 for a study involving a housing market model. The sum of $20,020 went to the University of California for a project for the 237 Credit Counseling program. Fairfield University obtained $361,483 for a project on identifying the role of communications in cities of the future. For the evaluation of the Urban Systems Engineering program, Howard University received $56,670. Long Island University obtained $14,291 with which to examine municipal information systems. The sum of $32,960 went to Harvard University for a contract project involving metropolitan region behavior. For municipal system research, the Claremont Graduate School obtained $163,739.

Federal Evaluations/Studies:

No evaluations have been undertaken for this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

109, 110.

URBAN PLANNING RESEARCH AND DEMONSTRATION ("701(b)" PROGRAM) (14.504)

Federal Agency:

HUD: Office of Policy Development and Research

Authorizing Legislation:

Section 701(b) of the Housing Act of 1954, as amended; 40 U.S.C. 461

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$5,000,000(a)	$100,299,000	$50,170,000
	PSE $ 313,708(b)	PSE $ 150,510(b)

Program Objectives and Operations:

To develop and improve methods and techniques for comprehensive planning, to advance the purpose of the comprehensive planning assistance program, and to assist in the conduct of research related to needed revisions of state statutes which create, govern, or control local governments or local government operations.

Funds are used for studies, research, and demonstration activities that meet research needs determined by the Department of Housing and Urban Development. In regard to formula and matching requirements, grants may go up to 100 percent federal funds, but cost-sharing is encouraged.

Eligible Applicants:

Public Agencies, public and private universities, profitmaking and not-for-profit organizations.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This figure is determined by a formula which states that the authorization is not to exceed 5 percent of the amount of appropriation for the entire Section 701 program, in this case, not more than 5 percent of $100,000,000.

(b) This estimated figure was derived from calculating the postsecondary education percentage of the total obligation amount and applying that same percentage to the total expenditure amount.

Available Program Data:

FY 72 funds awarded to academic educational institutions involved contracts to three universities. Indiana University obtained $115,000 for an analysis of state migration for development of urban growth strategies. Washington University, St. Louis, received $33,800 for a study of the abandonment process in St. Louis. The University of Rochester received $164,908 to analyze the effects of zoning on land prices.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

DEPARTMENT OF THE INTERIOR

INDIAN COMMUNITY DEVELOPMENT (15.104)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Community Services, Division of Community Development

Authorizing Legislation:

Snyder Act, November 2, 1921, 42 Stat. 208, P.L. 67-85; 25 U.S.C. 13; Act of June 25, 1910, paragraph 23; 36 Stat. 861; 25 U.S.C. 47, the Buy Indian Act

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$900,000	$900,000	$900,000

Program Objectives and Operations:

To strengthen the community organization skills of Indian communities and to provide Indian tribes and Indian interest organizations with funds to prepare themselves to assume, under service contracts with the Bureau of Indian Affairs (BIA), control over and responsibility for programs and other activities traditionally provided for them by the BIA.

The program provides for training and research in community development. It also provides for specific community development projects as well as community development staff. Formula and matching requirements are not applicable.

Eligible Applicants:

Applicants must be federally recognized Indian tribes, Indian interest organizations, or individual members of federally recognized tribes.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72 funds were granted to Indian tribes to help them gain the training and expertise necessary to take over traditional BIA programs by contract or by other means. Special emphasis was placed on developing contracts with universities, with Indian interest groups, and with other appropriate organizations that provided tribes and local Indian communities with technical assistance and other aid.

Community development contracts with tribal groups resulted in the tribal take-over of the Road Maintenance program of the Flathead Agency through the Elmo Dayton Community Development Project.

INDIAN EMPLOYMENT ASSISTANCE (15.108)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Community Services, Division of Employment Assistance

Authorizing Legislation:

Snyder Act of November 2, 1921, 42 Stat. 208, P.L. 67-85; 25 U.S.C. 13; Indian Adult Vocational Training Act of August 3, 1956, P.L. 84-959, 70 Stat. 986; U.S.C. 309

FY 72 Authorization:	FY 72 Obligations:		FY 72 Expenditures (Outlays):
Indefinite	$ 2,600,000	On-the-job training	$ 2,500,000
	$30,600,000	Institutional training	$29,100,000
	$ 6,600,000	Indian Mobility	$ 6,300,000

Program Objectives and Operations:

To provide vocational training and employment opportunities for Indians.

The program is designed to assist Indian people in obtaining a marketable skill and employment. It may be used for vocational training in schools approved by the Bureau of Indian Affairs (BIA), for assistance in job placement, and for general employment counseling. Eligible Indians may receive vocational training and job placement on or near the reservation or in an urban area. There are no formula or matching requirements.

Eligible Applicants:

The applicant must be a member of a recognized tribe, band, or group of Indians, whose residence is on or near an Indian reservation under the jurisdiction of the Bureau of Indian Affairs. For vocational training grants, he must be one-quarter degree or more of Indian blood.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There were several programs administered in FY 72 with funds from the Indian Employment Assistance program. Those that relate to postsecondary education are included in the Adult Vocational Training program. These programs are (1) On-the-Job Training; (2) Institutional Training; and (3) Indian Mobility, which is a training program on the reservations for those Indians who wish to remain there.

Most of the trainees are between the ages of 18 and 35. In FY 72, 7,960 trainees participated in the institutional training program, and 1,670 trainees participated in the on-the-job training program. Both of these categories include members participating in the Indian Mobility program.

Training periods are a maximum of 24 months. However, the training program for Registered Nurses takes up to three years. Over 800 schools offer over 2,000 courses under the approval of the BIA. BIA usually pays one-half of the employer's entry wage in on-the-job training.

Federal Evaluations/Studies:

There are no official evaluations of this program.

INDIAN AGRICULTURAL EXTENSION (15.101)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Economic Development

Authorizing Legislation:

Snyder Act of November 2, 1921, 41 Stat. 208, P.L. 67-85; 25 U.S.C., Section 13. Memorandum of Agreement of March, 1956, between the Bureau of Indian Affairs, Department of the Interior, and the Extension Service, Department of Agriculture

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$2,285,000	$2,221,000	$2,151,000
	PSE $2,191,000	$2,121,945(a)

Program Objectives and Operations:

To provide assistance to individual Indians, families, and groups on problems concerning farming, ranching, family economics, consumer education, homemaking, youth development through 4-H and other youth organizations.

Funds provide for contracts with state universities and for personal services of Bureau of Indian Affairs employees in order to provide advisory and counseling services to Indians. There are no formula or matching requirements.

Eligible Applicants:

State university extension programs serving federally recognized Indian organizations and individuals.

Primary Beneficiaries:

Federally recognized Indian organizations and individuals.

Available Program Data:

In FY 72, extension program contracts were made with 18 state universities and two tribal community colleges in Rosebud, South Dakota, and Pine Ridge, South Dakota. Approximately 200,000 Indians were served by this program.

(a) This estimated figure was derived by calculating the postsecondary percentage of the obligation amount and applying that same percentage to the expenditure figure.

Federal Evaluations/Studies:

There have been no national evaluation studies of this program.

INDIAN LOANS--ECONOMIC AND SOCIAL DEVELOPMENT (INDIAN CREDIT PROGRAM) (15.124)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Economic Development

Authorizing Legislation:

Indian Reorganization Act of June 18, 1934, Section 10, P.L. 73-383, 48 Stat. 986; 25 U.S.C. 470; and a number of subsequent supplemental acts for specific credit purposes

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$2,146,000	$2,109,000 PSE $[(a)]	$2,090,000 PSE $[(a)]

Program Objectives and Operations:

Assistance is provided to Indians, Eskimos, and Aleuts to obtain financing from private and governmental sources which serve other citizens. When otherwise unavailable, financial assistance through the Bureau of Indian Affairs (BIA) is provided to eligible applicants for any purpose that will promote their economic or social development.

Loans may be used for business, industry, agriculture, rehabilitation, housing, education, and for relending to members of Indian organizations. Funds must be unavailable from other sources at reasonable rates of interest. They may not be used for speculation. Except for educational purposes, BIA financial assistance must be used on or near Indian reservations. Formula and matching requirements do not apply to this program.

Eligible Applicants:

To apply, Indians, Eskimos, and Aleuts must be at least one-quarter degree of Indian blood and not members of an Indian organization which conducts its own credit program. Organizational applicants must have a form of organization recognized by the Commissioner of Indian Affairs.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) The portion of obligations and expenditures which went to postsecondary students is unavilable from BIA. It is estimated that the postsecondary portion is less than $89,131, the total amount loaned to students.

Available Program Data:

In FY 72, two postsecondary education loans were made directly from this program to individuals, totaling $5,250. Generally, funds from this program are distributed to the tribes, which then grant loans to individuals from a revolving fund. Monies in the revolving fund come from a variety of sources including federal money from this program, loan repayments, and tribal monies. A total of 83 loans were made to students in FY 72 from tribal funds, amounting to $84,131. Information determining the federal portion of the $84,131 that was obligated through this program is unavailable from BIA.

Federal Evaluations/Studies:

There have been no national evaluations of this program.

INDIAN EDUCATION--ADULTS (15.100)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Education Programs

Authorizing Legislation:

Snyder Act of November 2, 1921, 42 Stat. 208, P.L. 67-85; 25 U.S.C., Section 13

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,717,000	$1,653,000	$1,656,000

Program Objectives and Operations:

To provide general instruction for Indian adults who lack a high school education.

This program provides basic adult education through direct training by Bureau of Indian Affairs employees or teachers contracted by the Bureau. Adult basic education includes reading, English, and mathematics, as well as a broader range of subject matter such as citizenship and consumer protection. Generally, courses are restricted to those not provided by other federal, state, or local agencies. Formula and matching requirements do not apply to this program.

Eligible Applicants:

The program generally is limited to persons 18 years or older residing on trust land who are one-quarter degree Indian blood or more.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a total of 7,947 persons were enrolled in adult classes: 1,662 were enrolled in adult basic education; 1,404 received instruction in preparation for the GED (Graduate Equivalency Diploma); and 4,881 received other training. Of those enrolled in the GED program, 591 received the GED. The other training category included clerical skills, home economics, auto mechanics, and other skill training courses. Most of the enrollees were of low socio-economic status, and about half were women.

Federal Evaluations/Studies:

There have been no national evaluations of this program.

INDIAN EDUCATION--COLLEGES AND UNIVERSITIES (HIGHER EDUCATION) (15.114)

Federal Agency:

Interior: Bureau of Indian Affairs, Office of Education Programs

Authorizing Legislation:

Snyder Act of November 2, 1921, P.L. 67-85; 25 U.S.C. 13

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$15,248,000	$15,002,615	$14,667,332

Program Objectives and Operations:

To encourage Indian students to continue their education and training beyond high school.

Grant funds may be used for tuition, required fees, textbooks, and miscellaneous expenses directly related to attendance at college. Funds are intended to assist students in pursuing regular accredited college courses necessary to achievement of a college degree. Students are expected to take advantage of the financial aid programs offered to all students and any other financial aids which may be available to them.

Eligible Applicants:

Must be persons of one-fourth or more degree Indian, Eskimo, or Aleut blood, who are members of tribes served by the Bureau of Indian Affairs (BIA) and have demonstrated their potential for college-level work, are enrolled in an accredited college, and have financial need.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, the BIA funded 10,500 students. Approximately 30 percent of these students were married. The age range was generally from 16 to 25 years, although some students were older. Approximately half of the students were female, and half were male. The breakdown by college classification was: freshmen, 4,940; sophomores, 2,900; juniors, 1,350; seniors, 760; and graduates, 550. Grants vary in amount depending on financial need. The average grant was $700 per semester in FY 72.

Federal Evaluations/Studies:

Higher Education Evaluation, a study of student characteristics and opinions, was completed by the Indian Education Resources Center of the BIA in 1973.

Data were obtained from 2,736 participants who responded to the questionnaire.

The majority of students (77 percent) stated that they were between 18 and 25 years old; 33 percent were in the 21-25 age group. For 69 percent of the respondents, English was their first language, while 26 percent reported that an Indian language was their first language.

Although 44 percent of the students' fathers and 40 percent of their mothers had not received formal education beyond high school, 77 percent of the respondents indicated that their parents encouraged them to attend college.

A large majority (84 percent) of the responding students attended high school other than BIA-operated high school, while the remaining 16 percent indicated attendance at a BIA school. Most (80 percent) attended a public college or university, while 20 percent attended a private school. More than half (61 percent) of the students went to schools with large Indian enrollment.

Grade classification of respondents was: freshmen, 40 percent; sophomores, 26 percent; juniors, 16 percent; and seniors, 13 percent. A majority (60 percent) were living off campus at the time of the questionnaire.

Sixty-nine percent of the respondents said their college offered special counseling services for Indian students, and 65 percent indicated that they took advantage of these services. Approximately 81 percent of the students thought that the home office personnel should make more frequent visits to the colleges to interact with the students.

Poor study habits (26 percent), followed by lack of high school preparation (23 percent), lack of motivation to study (18 percent), and lack of finances (15 percent) were the biggest problems mentioned by most of the students. Of the 29 percent of the respondents who had dropped out, 21 percent cited family obligations as the primary reason for dropping out, while 20 percent mentioned lack of funds, and 18 percent mentioned going back to work.

Sources of non-BIA support: 18 percent of the respondents had a part-time job; 16 percent had a tribal scholarship; 16 percent had an Educational Opportunity Grant; 14 percent received aid from churches; 11 percent received National Defense Student Loans; 8 percent received college scholarships; 6 percent participated in the Work-Study program; 5 percent received state scholarships; and 25 percent received other non-BIA sources of assistance. Seventy-five percent of the students reported that they received no financial support from their parents, and 21 percent indicated that they received parental support amounting to $300 or less.

Annual parental income was estimated to be $3,000 or less by 36 percent of the respondents; between $3,001 and $7,000, by 31 percent; between $7,001 and $10,000, by 20 percent; and over $10,000, by 13 percent.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

111.

MINE HEALTH AND SAFETY EDUCATION AND TRAINING (15.305)

Federal Agency:

Interior: Bureau of Mines

Authorizing Legislation:

Federal Metal and Nonmetallic Mine Safety Act, P.L. 89-577; Federal Coal Mine Health and Safety Act of 1969, P.L. 91-173; 30 U.S.C. 1-11, 734 and 952

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$30,000,000 (a)	$5,138,000	$5,138,000

Program Objectives and Operations:

To provide for health and safety education and training of mine operators, miners, and inspection and safety personnel.

Programs are provided for education and training in: (1) the recognition, avoidance, and prevention of accidents or unsafe or unhealthful working conditions in mines; (2) the use of permissible equipment; and (3) first aid and mine rescue methods. Funds are also for the development of programs with educational institutions for training new inspection personnel. Formula and matching stipulations and time phasing of assistance do not apply for this program.

Eligible Applicants:

Any person or organization interested in healthful and safe mine working conditions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

According to the 1973 Catalog of Federal Domestic Assistance, Office of Management and Budget, FY 72 accomplishments of the program involved the training of 60,000 coal miners and 10,000 non-coal miners in first aid, accident prevention, and mine rescue at the Bureau's training centers. Industry instructors were also trained and certified. Courses were presented to over 70,000 coal miners and 12,000 non-miners.

(a) Authorization for the entire Bureau of Mines.

Federal Evaluations/Studies:

While no overall studies have been completed which evaluate this program nationally, interested readers are referred to a 1972 study contracted by the Bureau of Mines with the Economic and Manpower Corporation (New York). Published in several reports, this study dealt with mining job opportunities for Papago Indians (Arizona). Copies of these reports are available from the Bureau of Mines.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

15, 16, 17.

MINE HEALTH AND SAFETY RESEARCH--GRANTS AND CONTRACTS (15.306)

Federal Agency:

Interior: Bureau of Mines

Authorizing Legislation:

Federal Coal Mine Health and Safety Act of 1969, P.L. 91-173

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$30,000,000[a]	$16,140,000	$15,817,200

Program Objectives and Operations:

To provide for the protection of the health and safety of persons working in the mining industry through research and new technology.

Financial assistance is provided to states and the mining industry for research, development, and training programs aimed at preventing mine accidents, the results of which must be available to the general public.

Eligible Applicants:

Public and private agencies, organizations, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

According to the 1972 Catalog of Federal Domestic Assistance (Office of Management and Budget), this program was responsible for the development of hardware and systems reducing safety and health hazards, including a large rotary drill mine rescue system, a mine disaster survival capsule, and systems allowing for the control of dust, reduction of noise, and better illumination in mines. Further data are not available from the Bureau of Mines.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

(a) Authorization for the entire Bureau of Mines.

MINERAL RESOURCES AND ENVIRONMENTAL DEVELOPMENT (15.303)

Federal Agency:

Interior: Bureau of Mines

Authorizing Legislation:

Grants for Support of Scientific Research, P.L. 85-934; Contracts for Scientific and Technologic Research, P.L. 89-672; 42 U.S.C. 1891 and 1900

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$30,000,000(a)	$2,750,000	$2,695,000

Program Objectives and Operations:

To complement the Bureau of Mines internal research and development program in accomplishing its mission and to furnish grant support to universities and other institutions in training and education of graduates in the mineral and fossil fuel fields.

Assistance is intended to enhance the Bureau of Mines mineral resources and environmental development programs which are directed toward the conservation, development, and efficient utilization of minerals and fossil fuels essential to the Nation's economy. Also, the research seeks to eliminate air and water pollution, recover and reclaim waste materials formerly discarded into the environment, and minimize occupational hazards to workers in the mineral industry. There are no specified formula or matching requirements.

Eligible Applicants:

Institutions of higher education or organizations with appropriate capabilities for the conduct of scientific research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

According to the 1972 Catalog of Federal Domestic Assistance (Office of Management and Budget), a number of large projects funded over two- and three-year periods were under operation in FY 72. Grantees and contractors contributed to the advancement of mineral and mineral problem sciences in areas including the quenching and removal of coal waste fires, stabilization of mine tailings piles, new products from mineral wastes, and knowledge of mineral economics. Additional data are not available from the Bureau of Mines.

(a) Authorization for the entire Bureau of Mines.

Federal Evaluations/Studies:

There are no pertinent evaluations available for this program.

ARCHEOLOGICAL INVESTIGATIONS AND SALVAGE (INTER-AGENCY ARCHEOLOGICAL SALVAGE PROGRAM (15.908)

Federal Agency:

Interior: National Park Service

Authorizing Legislation:

Historic Sites Act of 1935, P.L. 74-292, 49 Stat. 666; Reservoir Salvage Act of 1960, P.L. 86-523, 74 Stat. 220; Historic Preservation Act of 1966, P.L. 89-665, 80 Stat. 915

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$510,869(a)	$510,869(a)

Program Objectives and Operation:

To retrieve archeological, historical, and paleontological values and data which otherwise would be lost as the result of the construction of federally funded or licensed reservoirs and related water resources developments; to analyze the resultant scientific data, which are to be interpreted by the professional community for the use of the interested public and the profession at large by encouraging professional publications. The program is conducted by: maintaining interagency liaison with federal construction and licensing agencies, such as the Corps of Engineers, Bureau of Reclamation, Tennessee Valley Authority, Soil Conservation Service, Federal Power Commission, and others, to identify projects and needs and coordinate programming; and negotiating contracts with qualified educational and scientific institutions to carry out the necessary investigations.

Contract money cannot be used for purchase of nonexpendable equipment to complete the surveys or excavations, or to cover the actual publishing costs of the report. The length and time phasing of assistance is determined by each contract. Although there are no requirements, contractors share costs to some extent in providing laboratory space, equipment, and professional supervision of actual field investigation.

Eligible Applicants:

Any public or private educational or scientific institution that has professional staff to plan and direct the field investigations and the necessary laboratory facilities and staff to properly analyze the data, prepare the required reports, and protect and preserve the artifactual data recovered.

(a) Amounts obligated and expended through negotiated contracts with public and private educational institutions. In addition, $145,652 was transferred to the National Park Service by other federal agencies in specific agency projects.

Primary Beneficiaries:

Participants and the general public.

Available Program Data:

In FY 72, about 49 contract projects were executed by 32 institutions in 21 states with the support of National Park funds. There were 26 public universities involved in these contracts.

Transferred funds supported about 13 contract projects conducted through seven public universities in five states.

Out of National Park funds, the largest contract ($120,000) was made with Washington State University for the excavation of the Ozetta Village Site.

The largest contract made with transferred funds amounted to $23,879 for survey and excavation in the Dolores River Project, executed by the University of Colorado.

Students are employed by the university that has contracted with the National Park Service to perform an archeological salvage project.

Federal Evaluations/Studies:

No evaluations are available for this program.

HISTORIC AMERICAN BUILDINGS SURVEY (15.903)

Federal Agency:

Interior: National Park Service

Authorizing Legislation:

Historic Sites Act of August 21, 1935, P.L. 74-292; 16 U.S.C. 463

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,989,100[a]	$245,700	$245,700

Program Objectives and Operations:

Provides technical direction, on a shared fund basis, to cooperating public and private agencies for the production of architectural and historical records of significant American buildings and provides measured drawings, photographs, and written data for deposit in the Library of Congress, where the records are made available to the public. Other historically significant structures and historical districts in the United States and its territories are similarly recorded. The bulk of the recordings involved the employment of university architecture students. Matching requirements state that 50 percent or more of the project cost be paid by the applicant.

Eligible Applicants:

State and local governments, educational institutions, historical and related organizations.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In the summer of 1972, ten field projects were sponsored by this program in Alabama, Florida, Nevada, New York, North Dakota, Pennsylvania, Puerto Rico, Rhode Island, Tennessee, and Virginia. About 17 student architects and approximately 29 other individuals, including professors, architects, and historians, staffed the projects. Each member was connected with one of about 26 universities and one historical commission.

Two contract projects were also made: one with a professor and the Ohio State University to work in Arizona and New Mexico; and another in Texas,

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(a) Authorization for all government units funded under the above Act.

with professors and student assistant architects of Texas A & M University. The Washington office hired three students from three universities for summer staff.

The Historic American Buildings Survey also hires several students on a work-study program with the University of Cincinnati. In FY 72, four students participated in this program during the academic year or summer.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

ADDITIONAL WATER RESOURCES RESEARCH (TITLE II PROGRAM) (15.950)

Federal Agency:

Interior: Office of Water Resources Research

Authorizing Legislation:

Water Resources Research Act of 1964, Title II, Sec. 200, P.L. 88-379, as amended; 42 U.S.C. 19611

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$10,000,000	$4,300,000	$2,296,000

Program Objectives and Operations:

To support research into any aspects of water problems related to the mission of the Department of the Interior which are desirable and not otherwise being studied.

Funds are available for meeting the necessary expenses of specific water resources research projects. The length of time for research project accomplishment varies, usually not exceeding three years. No cost-sharing is required by statute; but some cost-sharing may be required to meet provisions of Office of Management and Budget Circular No. A-100, and significant cost-sharing may be appropriate.

Eligible Applicants:

Educational institutions, private firms and foundations, local and state governmental agencies, individuals whose training, experience, and qualifications are adequate for the conduct of water research projects.

Primary Beneficiaries:

Same as those noted above as eligible applicants

Available Program Data:

The Additional Water Resources Research program was carried out at 28 universities and colleges in FY 72. Participants included both professional investigators and student assistants. Professional investigators were predominantly representative of the various engineering disciplines. In 1971-72, one professional investigator had no degree, 50 had bachelor's degrees, 134 had earned their master's degrees, and 234 professional investigators had obtained their postdoctoral degrees. Many of this latter group were continuing their postdoctoral studies. Students assisting the professional researchers were also in various engineering fields, with most working for graduate degrees. In 1971-72, 25 student assistants had no degrees, 109 had earned their bachelor's degrees, 86 had completed their master's degrees, and ten had received their postdoctoral degrees and were continuing their postdoctoral research.

One hundred and thirty-two projects were active in FY 72.

Federal Evaluations/Studies:

There are no particular evaluations of this program, other than a listing of the project, performing organization, and amount of grant or contract for the project, as noted in the 1972 Annual Report of the Office of Water Resources Research.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

112.

WATER RESOURCES RESEARCH--ASSISTANCE TO STATES FOR INSTITUTES (ANNUAL ALLOTMENT PROGRAM) (15.951)

Federal Agency:

Interior: Office of Water Resources Research

Authorizing Legislation:

Water Resources Research Act of 1964, Title I, Sec. 100, P.L. 88-379 as amended; 42 U.S.C. 1961l

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$5,100,000	$5,100,000	$5,144,000[a]

Program Objectives and Operations:

To provide financial support to Water Resources Research Institutes located at designated state universities in each of the 50 states, Puerto Rico, and when funds are appropriated, the District of Columbia, Guam, and the Virgin Islands, to work on one or more aspects of water resources research, disseminate information as to research results, and train scientists.

Funds are provided to support a program including basic or applied research, and setting up conferences to discuss research needs or results. In general, the funds are used to study regional, state, or local water problems, but the results often have national significance. Federal allotment funds may be used for any cost applicable to research grants to educational institutions, provided that the direct costs of the state institute program, as distinguished from indirect costs, are not less than the amount of federal funds made available. Federal funds cannot be applied to (1) formal instructional activities, adult or public education, extension or similar activities, or (2) the cost of permanent buildings, either directly or indirectly. Assistance is on an annual, fiscal-year basis (renewable), time phasing being as needed by the institutes. Grants are awarded under a formula by which $100,000 goes to each State Water Resources Research Institute annually, provided that the total cost of each annual program contains not less than $100,000 of direct cost items.

Eligible Applicants:

One state university Water Resources Research Institute in each state. Other colleges and universities may participate in the program in cooperation with, and administered by, the designated state institute.

(a) Includes carryover funds.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

One hundred and three colleges and universities, consisting of schools in the U.S. and Puerto Rico, participated in this Water Resources Research--Assistance. A total of 1,988 student research assistants were supported by funds furnished by this program, and its related Matching Grants to Institutes program.

Federal Evaluations/Studies:

A general presentation of the Water Resources Research Act, Title I, which consists of both the Assistance to States for Institutes program, and the Matching Grants to Institutes program (see p. 523), was contained in the Office of Water Resource Research's *1972 Annual Report: Cooperative Water Resources Research and Training*. According to the *Report*, more than 1,300 professional investigators representing some 100 specialized engineering, scientific, and social disciplines participated in projects during FY 72. Specialized engineering was the primary discipline of 32 percent of the investigators; economics was the second most represented discipline, an indication of the emphasis being placed on the fiscal and social aspects of water resources research. Eighty-seven percent of the investigators had doctoral degrees, 12.6 percent had master's degrees, and fewer than one percent had no advanced degree. A continued trend toward more interdisciplinary research was noticed, with representatives of the social and physical sciences frequently being teamed on the same projects.

Of the total of 1,988 students reported as having received financial support under the program while serving as research assistants on Title I projects, 36.0 percent were undergraduates, 39.0 percent were candidates for their master's degrees; 22.8 percent were doctoral degree candidates; and 2.2 percent were postdoctoral students. Disciplines of engineering, biology, geology, economics, and chemistry had the largest number of student representatives, while a substantial increase in the employment of political science students was noted. Most of the students were male, and most were between 19 and 35 years old.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

112.

WATER RESOURCES RESEARCH--MATCHING GRANTS TO STATE INSTITUTES (MATCHING GRANT PROGRAM) (15.952)

Federal Agency:

Interior: Office of Water Resources Research

Authorizing Legislation:

Water Resources Research Act of 1964, Title I, Sec. 101, P.L. 88-379 as amended; 42 U.S.C. 19611

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$5,000,000	$3,000,000	$3,349,000

Program Objectives and Operations:

To provide matching funds to Water Resources Research Institutes located at a designated state university in each of the 50 states and Puerto Rico to train scientists and support work in various aspects of water resources research.

Funds are to meet the necessary expenses of specific water research projects which could not otherwise be taken, including the expenses of planning and coordinating regional water resources research projects by two or more institutes. In general, the funds are used to study regional water problems, but the results often are of national interest. Federal funds cannot be applied, either directly or indirectly to (1) formal instructional activities, adult or public education, or (2) the cost of permanent buildings. The length of time (renewable) for research project accomplishment varies but is not usually in excess of three years. Matching requirements are on a dollar-for-dollar basis.

Eligible Applicants:

State Water Resource Institutes. Other colleges and universities within the 50 states and Puerto Rico may participate in the program in cooperation with, and under the administration of, the appropriate state Water Resources Research Institute.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 51 universities and colleges received funds under this part of the Title I program. Student assistants as well as professional investigators were supported under this program.

Federal Evaluations/Studies:

For a study of the Title I program participants as a whole, see the description under the Assistance to States for Institutes program, p. 572.

DEPARTMENT OF JUSTICE

LAW ENFORCEMENT ASSISTANCE--NARCOTICS AND DANGEROUS DRUGS TRAINING (16.004)

Federal Agency:

Justice: Bureau of Narcotics and Dangerous Drugs

Authorizing Legislation:

Comprehensive Drug Abuse Prevention and Control Act of 1970; Reorganization Plan No. 1 of 1968

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$153,819 (a)	$66,345

Program Objectives and Operations:

To acquaint appropriate professional and enforcement personnel, domestic and foreign, with (1) techniques in the conduct of drug investigations; (2) aspects of physical security in legitimate drug distribution; (3) techniques in analysis of drugs for evidential purpose; and (4) pharmacology, sociopsychological aspects of drug abuse, drug education, and investigative techniques.

Eligible Applicants:

Foreign, state, and local law enforcement and regulatory officials; crime laboratory technicians and forensic chemists.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 69 individuals participated in the Police Training program under this program. State, county, and city police officers were trained, as well as two police officers of foreign countries. In the Law Enforcement Training program, 3,941 state, county, and city police officers were trained. Seventy-three Military Police officers of the U.S. Armed Services participated in the Military Police Training program. In addition, 98 forensic chemists and crime laboratory technicians of state, county, and city police agencies were trained under the one-week Forensic Chemist Training program.

(a) This figure does not include the cost in instructors' salaries or the cost of participants' travel or subsistence expenses.

Federal Evaluations/Studies:

These specific programs are subjected to ongoing evaluations. This includes intensive monitoring of classroom and practical exercise instruction as well as informal discussions with participants and members of the training staff. Immediate post-instruction evaluations include an analysis of student responses to evaluation questionnaires as well as structured discussions with participants and members of the training staff. Post-instruction evaluation (Field Feedback) includes an analysis of responses to questionnaires sent to participants at predetermined intervals after completion of training as well as interviews with some participants and their supervisors.

According to the Justice Department, results of the evaluative process indicate that the programs are meeting their objectives. Post-instruction field feedback indicates that participants and their supervisors credit the training received in these programs for qualitative and quantitative increases in successful drug investigations. The evaluative process also shows that these programs have enhanced the training capabilities of state and local departments.

The ten-week Police Training School in particular is providing these departments with graduates who are being used very effectively in departmental, community, and college training programs.

LAW ENFORCEMENT ASSISTANCE--FBI ADVANCED POLICE TRAINING (FBI NATIONAL ACADEMY) (16.300)

Federal Agency:

Justice: Federal Bureau of Investigation

Authorizing Legislation:

P.L. 90-351, approved June 19, 1968, Sec. 404(a)(1); 42 U.S.C. 3744(a)(3)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,849,000	$1,848,599

Program Objectives and Operations:

To provide advanced training to experienced personnel of local, county, state, and selected federal law enforcement agencies with special emphasis on developing each graduate as a capable instructor or administrator for his own department. To afford specialized advanced training to the above personnel.

Eligible Applicants:

Regular, full-time officers of duly constituted law enforcement agencies serving a municipality, county, or state, as well as some selected, qualified representative of federal agencies having law enforcement responsibilities. Candidates must meet certain age, experience, education, physical, and character requirements.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, 200 career law enforcement officials participated in this program, in two sessions, each involving 100 students. The average student's age was 38 years, and all were male. Every state had at least one representative and, in addition, there were approximately 20 foreign officers in attendance. Each National Academy student must be at least a high school graduate and many are working on, or have received, college degrees.

Federal Evaluations/Studies:

The quality of the 12-week National Academy Program, as well as the instructional staff, has been evaluated through the critique method and random interviews. A followup interview is conducted upon the student's return to his home.

LAW ENFORCEMENT ASSISTANCE--FBI FIELD POLICE TRAINING (FBI FIELD POLICE TRAINING) (16.302)

Federal Agency:

Justice: Federal Bureau of Investigation

Authorizing Legislation:

P.L. 90-351, approved June 19, 1968, Sec. 404(a)(3); 42 U.S.C. 3744(a)(3)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$2,579,000	$2,579,355

Program Objectives and Operations:

To develop the professional skills of law enforcement officers. FBI training assistance is available in complete programs of instruction or as supplemental courses to already existing local police training sessions.

Eligible Applicants:

All authorized municipal, county, and state law enforcement agencies.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Field police training is conducted at the specific request of individual law enforcement agencies. In FY 72, 10,165 schools were conducted, involving 308,828 individuals. California had the highest number of FBI-assisted training schools (954), and Texas had the second highest number (700).

Federal Evaluations/Studies:

FBI field police training programs are evaluated by the students and sponsors of the training programs upon completion. In addition, the courses and instructional staff are periodically evaluated by the instructors' superiors.

LAW ENFORCEMENT ASSISTANCE--INTERNSHIPS (16.512)

Federal Agency:

Justice: Law Enforcement Assistance Administration

Authorizing Legislation:

Omnibus Crime Control and Safe Streets Act of 1968, Sec. 406f, P.L. 90-351, as amended by the Omnibus Crime Control Act of 1970, P.L. 91-644; 42 U.S.C. 3746, as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$ 0	$264,000[a]

Program Objectives and Operations:

To provide to students pursuing careers in the criminal justice system an opportunity to have practical work experiences relevant to their studies.

Eligible Applicants:

Schools offering a program of study at the baccalaureate level.

Primary Beneficiaries:

Full-time students from any academic discipline who are interested in the criminal justice system. Priority is given to students majoring in criminal justice or related curriculum who are enrolled at the third year or higher educational level.

Available Program Data:

Five hundred and ninety-five students participated in this program in FY 72. These individuals were both undergraduate and graduate students. Sixty-two community colleges, universities and colleges, and other higher education institutions in the U.S. were involved with the program.

Federal Evaluations/Studies:

No evaluations were performed in 1972, but they are now being undertaken.

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[a] FY 71 carryover funds.

LAW ENFORCEMENT ASSISTANCE--TRAINING (407) (16.513)

Federal Agency:

Justice: Law Enforcement Assistance Administration

Authorizing Legislation:

Omnibus Crime Control and Safe Streets Act of 1968, Sec. 407, P.L. 90-351, as amended by the Omnibus Crime Control Act of 1970, P.L. 91-644; 42 U.S.C. 3746, as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	\$1,000,000 (a)	\$1,000,000

Program Objectives and Operations:

To upgrade the professionalism of criminal justice practitioners through seminars, workshops, and conferences.

Eligible Applicants:

Educational institutions, private contractors, business enterprises, state and local criminal justice agencies and jurisdictions, and any organizations capable of providing manpower development assistance.

Primary Beneficiaries:

State and/or local criminal justice personnel.

Available Program Data:

The total number of trainees in FY 72 was 3,311. Nineteen universities and colleges participated in this program. Regional offices received \$722,315 for training purposes. The National Court Conference in Denver received \$45,000, and \$20,062 remained in reserve in Washington. Funds for the Manpower and Development Assistance Division of the Administration totaled \$212,623 for training.

Federal Evaluations/Studies:

There are no national evaluations of this program.

(a) Includes carryover funds.

LAW ENFORCEMENT EDUCATION PROGRAM--STUDENT FINANCIAL AID (LEEP) (16.504)

Federal Agency:

Justice: Law Enforcement Assistance Administration

Authorizing Legislation:

Omnibus Crime Control and Safe Streets Act of 1968, Sec. 406, P.L. 90-351, as amended by the Omnibus Crime Control Act of 1970, P.L. 91-644; 42 U.S.C. 3746, as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$29,000,000	$29,000,000(a)	$28,071,356(a)
	($15,406,000)(b)	($14,917,118)(b)
	($14,594,000)(c)	($13,154,238)(c)

Program Objectives and Operations:

To professionalize criminal justice personnel (including police, courts, and corrections professions) through higher education.

Schools make direct grants and loans to students in accordance with established guidelines and regulations. Loans are not to exceed $1,800 per academic year. Grants of $200 per quarter or $300 per semester are not to exceed the actual cost of tuition, fees, and books. Loans are forgiven at a rate of 25 percent for each full year of employment in a public law enforcement agency.

Eligible Applicants:

Regionally accredited institutions of higher education. Institutional eligibility to make LEEP loans to students is contingent upon offering at least 15 semester hours in directly related law enforcement courses.

Primary Beneficiaries:

Employees of a public law enforcement agency for grants. Loans are limited to full-time students who enroll in a course of study which will include at least 15 semester credit hours, or the equivalent, in directly related law enforcement courses during the total period of their studies.

(a) Total funds obligated and expended for this program including both grants and loans.

(b) These funds represent direct loans made under this program.

(c) These funds represent direct grants made under this program.

Available Program Data:

In FY 72, 87,000 students participated in the LEEP program. Most of the students were between 20 and 40 years old. Over 80,000 of the participants were male, while most of the students (72,715) were white. Of the students receiving grants, 1,408 are federal criminal justice employees; 26,760 were employed by state criminal justice agencies, 11,974 were employed by county criminal justice agencies; 30,294 were employed by municipal criminal justice agencies; and 16,564 were students preparing for future employment. Of 70,436 employed grant recipients, 56,700 are in police work, 9,736 in corrections, and 4,000 in courts and other employment. A total of 1,962 institutions participated in the program.

Federal Evaluations/Studies:

According to program officials, one evaluation study of this program has been done: "An Evaluation of LEEP: Its Impact on Georgia Law Enforcement Officers," June, 1972, sponsored by Georgia Bureau of State Planning and Community Affairs; Institute of Government, University of Georgia. Other studies are not available at this time.

LAW ENFORCEMENT RESEARCH AND DEVELOPMENT--GRADUATE RESEARCH FELLOWSHIPS (16.505)

Federal Agency:

Justice: Law Enforcement Assistance Administration

Authorizing Legislation:

Omnibus Crime Control and Safe Streets Act of 1968, P.L. 90-351, as amended by the Omnibus Crime Control Act of 1970, P.L. 91-644; 42 U.S.C. 3741-3743, as amended

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$211,277	$211,277

Program Objectives and Operations:

To enhance the criminal justice system by providing support to doctoral students engaged in dissertation research. The program provides fellowship stipends and and tuition and fees reimbursement.

Eligible Applicants:

Students who are doctoral candidates engaged in dissertation research of direct relevancy to law enforcement and criminal justice, preferably in regard to manpower, and who are not receiving any other direct federal educational benefit, with the possible exception of veteran's benefits.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 42 graduate students participated in this program; six were female, and 36 were male. The total number of institutions participating was 29.

Federal Evaluations/Studies:

There are no national evaluations of this program.

DEPARTMENT OF LABOR

CONCENTRATED EMPLOYMENT PROGRAM (CEP) (17.204)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Economic Opportunity Act of 1964, as amended, Sec. 123(a) 5

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$154,601,000	$155,518,000

Program Objectives and Operations:

To give priority to urban neighborhoods or rural areas having serious problems of unemployment and subemployment. Local sponsors, under contract, coordinate and concentrate on various federal manpower categorical efforts to attack the total employment problems of the most severely disadvantaged persons located in limited target areas.

Working through a single contract with a single sponsor (usually a Community Action Agency), the Manpower Administration provides the funding for the locally developed projects. The local sponsor provides, usually through subcontractors, programs including outreach and recruitment, orientation, counseling and job coaching, basic education, various medical, day care, and other supportive services, work experience or vocational training under a variety of individual manpower programs, job development and placement, and individualized followup after placement. .

Eligible Applicants:

No new projects are being funded. Existing annual contracts are being renewed where appropriate.

Primary Beneficiaries:

Residents of the CEP target area who are disadvantaged.

Available Program Data:

A total of 122,300 persons were enrolled in CEP programs in FY 72, 37,600 of whom were continuing enrollees and 84,700 were new enrollees. Of the 88,000 persons who terminated from the program, 48,700 were early terminations and 39,300 (45 percent) completed and were placed in jobs. Characteristics of the 84,700 persons who enrolled in CEP in FY 72 included: 58.6 percent were male; 14.7 percent were under 19 years; 30 percent, 19 to 21 years; 49.9 percent, 22 to 44 years; 5.4 percent, 45 years and older. Twenty-nine percent were white; 61.2 percent, black; and 9.8 percent, other. Nearly 20 percent were

Spanish-speaking. As to education, 15.6 percent had completed eight years of school or less; 42 percent, from nine to 11 years; and 42.5 percent, 12 years of school or more. Almost 60 percent were heads of households and 69.7 per cent were primary wage earners. Sixty-five percent were from families with incomes below $3,000; 27.3 percent had family incomes between $3,000 and $4,999; and 7.7 percent had family income of $5,000 and over. Fifty-five percent had been employed for less than three years; 32.6 percent, from three to nine years; and 12.4 percent, ten years or more. At the time of enrolling in the program 94.2 had been unemployed (55.5 percent of these for 27 weeks or longer); 3.6 percent were underemployed; 98.5 percent were disadvantaged; 13.5 percent received public assistance; 8.4 percent were handicapped; 19.2 percent were veterans; and 4 percent were military service rejectees. The Office of Manpower and Budget's Manpower Special Analysis Data Files provide the following breakdown of costs by type of service: 4 percent of the funds went for remedial education; 11 percent for skill training; 6 percent for work experience; 9 percent for outreach, counseling, and placement; 15 percent for local program administration; 9 percent for other supportive services; and 45 percent for allowances and wages.

Postsecondary institutions receive a portion of the funds with which they administer aspects of the CEP program. The Department of Labor was unable to provide the number of institutions and amount of funding which went to postsecondary institutions.

This program has been consolidated with other Manpower programs into the Manpower Revenue Sharing program, OMB #17.232, in the FY 73 edition of the OMB Catalog.

Federal Evaluations/Studies:

A study of the urban CEP program during the period of July 1969 to July 1970 was performed by the System Development Corporation. Fourteen representative cities were selected for the study. Personal interviews were conducted to assess the impact of the CEP program on the general community, present and past participants, and employers. Mailed questionnaires were also sent to a number of employers.

The most significant impact of CEP on the general community was that CEP (together with other anti-poverty programs) substantially increased public awareness of the scope and nature of poverty existing in the community and of the specific problems which confront the disadvantaged.

The study found a modification of Civil Service regulations in many states which permitted State Employment Service offices to hire disadvantaged persons for CEP functions. Also, CEP expanded the role of state employment agencies in providing service to the disadvantaged. The impact of CEP on city governments varied widely, primarily with the degree of city involvement with the program, and consisted mainly of an increased understanding of the problems facing the disadvantaged.

The study found that ineffective administrative control and generally poor operational performance adversely affected CEP's reputation in many communities, especially in the early months of the program. Also, friction between the local Community Action Agency (frequently the sponsor of CEP) and state employment services was created or significantly aggravated by CEP, largely because of the CAA role of providing manpower services which many state employment services considered an encroachment on their job responsibilities.

CEP contributed to intergroup dissonance in many areas having two or more disadvantaged groups, since the larger group, which often received greater representation on CEP's staff, tended to emphasize service to its own members. The study found that generally CEP participants were not the most disadvantaged individuals in a community but rather persons who, though encountering difficulty finding employment, became employable following minimal preparation. A positive impact of CEP was that it employed many individuals from the target area in its organizational structure, providing them with the opportunity to develop additional administrative skills. Generally, CEPs did not obtain extensive support from the business community, however, where it did the project was able to attract more and higher quality employment opportunities.

Although most employers indicated that they agreed with the objectives of programs like CEP and recognized a need for them, 74 percent of the mail respondents and 40 percent of the personal survey respondents thought that the program cost more than it was worth. A majority (51 percent of those interviewed and 75 percent of mail responses) thought that many participants were referred to jobs with inadequate qualifications. Reasons given by employers for participating in the program were: (1) their sense of social responsibility; (2) the reputation of CEP; (3) the local labor market situation; and (4) equal employment opportunity regulations. Major reasons for non-participation were: (1) poor experience with CEP hires; (2) the inadequacy of their training; and (3) the trainees' lack of needed qualifications. More employers indicated satisfaction than dissatisfaction in evaluating job performance and work attitudes, even though they found these factors to be the more serious obstacles to the success of the program. Employers rated CEP hires as high as hires from other manpower training programs but did not rate them as highly as other employees in similar jobs.

An important effect of the program was that approximately 30 percent of the employers who had hired CEP participants had lowered their entry-level standards. Most of these employers (70 percent) decreased educational and/or experience requirements, others eliminated or lowered acceptable scores in intelligence tests and tests of personality traits and skills, some liberalized their policy toward references and credit requirements, and a few indicated increased toleration toward the acceptance of applicants with records of crime, alcoholism, and drug addiction.

One third of the 576 recommendations made by employers were concerned with attitudes and motivation of CEP referrals; many felt that these characteristics should be found to be appropriate before referrals were made. The second most frequently mentioned recommendation (25 percent of the total) alleged incompetence and a low level of professionalism among the CEP administrative staff. Many employers thought they should have some input in the training or provide all the training of their hires.

The attitudes of participants toward CEP were generally positive, although there was some dissatisfaction with program organization, the failure to acquire employment, or with the job obtained. Approximately 50 percent of the CEP participants interviewed (more of the present than past participants) felt that generally they were living better since CEP in terms of higher incomes, better jobs, and general improvement in standard of living. The majority of respondents (nearly 65 percent) thought they had obtained jobs as a result of CEP which they would not have otherwise, even though only 58 percent of the respondents stated that they had been referred to a job by the program. Of the individuals referred to jobs by CEP, 80 percent were placed in one of those jobs. However, approximately 40 percent of the respondents stated that they had not been employed since leaving CEP. The jobs which participants held subsequent to CEP generally paid more and, according to the participants, offered greater chances for advancement, and yielded greater job satisfaction than jobs held prior to CEP. However, these jobs still tended to be low-paying with hourly wages predominantely less than $2.50. This was especially true for women, as only 8 percent earned $2.50 an hour or more compared with 25 percent of the men.

Jobs held prior to CEP placed little emphasis on the individual and permitted higher rates of tardiness and absenteeism, while post-CEP jobs required more individual responsibility for which participants were not fully prepared by the program. Job turnover tended to be higher for post-CEP than for pre-CEP employment. However, nearly 50 percent of the respondents were employed at the time of the interview.

The study concluded that, although CEP provided improved employment opportunities for a substantial number of its participants, it did not adequately prepare them to assume the increased responsibility required by the job and expected by the employer. The study recommended that significantly greater emphasis should be placed on the orientation component of the CEP program and that this component be redesigned to provide effectively the type of individual reorientation required.

A study of the impact of rural CEP programs operating in Arkansas, Maine, Minnesota, New Mexico, and Tennessee was begun in 1970 by Urban Systems Research and Engineering, Inc. Data were accumulated through the use of: (1) case studies; (2) questionnaires administered to CEP participants and to businessmen; and (3) specific reports on particular areas of interest.

CEP is composed of several components which are designed to meet the needs of participants and the requirements of employers. The study found that orientation had been helpful in acquainting participants with the procedures of finding a job and in managing their finances but that it had not had much success in the important area of reorienting enrollees' motivation and work attitudes toward their new work environment. The Basic Education component was used largely for holding, and many participants were removed before they had fulfilled their goals. It was found that Institutional Skill Training was of limited value in most areas because of the poor quality of vocational training or the lack of demand for skilled personnel.

Because CEP lacks control over the retention or upgrading of On-the-Job Trainees, some employers exploited the program as a source of cheap labor. Employers frequently did not participate in On-the-Job Training (OJT) because of the large amount of paper work and federal "interference." Most large OJT contracts are written by the Job Opportunities in the Business Sector (JOBS) on better terms than CEP can offer. The Operation Mainstream program was found to function primarily as income maintenance for the hopelessly disadvantaged and as a holding slot for others. The projects did not seem to be geared towards meaningful work experience or community improvement. Coordination with employment services was found to have been beneficial to CEP in job vacancy identification but an energetic job development component is crucial to the program.

The program was found to have had a positive economic impact on the participants. For those who completed CEP, annual income increased from $1,830 to $2,396, while for noncompleters income increased from $1,414 to $2,267. Persons over 45 did not benefit nearly as much as did younger participants. Whites were found to have benefited substantially more than blacks. Estimated yearly income increases to whites was $724 for completers and $997 for noncompleters; while for blacks comparable increases were $197 and $368, respectively.

After CEP, 17 percent more of the positions held by participants were full-time, year-round jobs, as opposed to part-time or seasonal employment. Also, after CEP, participants employed by manufacturing businesses increased from 22 percent to 28 percent, those employed by public agencies increased from 19 percent to 24 percent, while the percentage working on farms declined from 10 percent to 3 percent, and those working in public households decreased from 3 percent to 2 percent.

Increased job satisfaction was reported by 43 percent of the respondents, while only 20 percent complained of less satisfaction with after CEP positions. Data showed that the distance traveled to work increased after the CEP experience, apparently demonstrating that the participants' perceived job market was enlarged. Desire to obtain employment was the primary reason given for joining CEP; 47 percent wanted any good job and 21 percent jointed to get a particular job. Overall, participants seemed to be satisfied with CEP. Satisfaction with particular components varied by site and center but was generally favorable.

Based on interviews with 88 businessmen the study found that although most employers agree that economic development is desirable, only a few are actively involved in development and some are actively opposed. Businessmen considered the availability of unskilled labor as the greatest advantage of rural employment; however, poor work attitudes, inferior quality of the labor force, and lack of skilled workers were mentioned as drawbacks.

CEP had contacted 57 percent of the respondents, but only 20 percent had contacted CEP to fill job openings. CEP was largely perceived by employers as having little impact, but this was attributed to external factors, such as economic recession and a surplus labor force. CEP participants were rated as being about the same quality as other employees. Availability of CEP trainees, when they were needed, followed by the actual performance of trainees, and the employer's sense of social responsibility were reported as the most important motiviations for employer participation in CEP.

The study concluded that although some adjustments should be made in the program to make it more responsive to the rural environment, CEP has had a "profound level of impact" on participants.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

115, 120, 122.

JOB CORPS (17.211)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Economic Opportunity Act of 1964, Title I-A as amended through December 30, 1969; 42 U.S.C. 2711

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$202,185,000	$181,600,000

Program Objectives and Operations:

To assist young persons who need and can benefit from an intensive program, operated in a group setting, become more responsible, employable, and productive citizens.

Enrollees receive room and board; medical and dental care; work clothing; a nominal allowance for purchase of dress clothing; a monthly living allowance of $30 minimum during an enrollee's first months of participation and up to $50 maximum thereafter; and a readjustment allowance of $50 for each month of satisfactory service for enrollees who complete their training or perform satisfactorily for six months or longer. An enrollee may make an allotment of $25 maximum per month to be paid to his wife and dependent children. The government matches this allotment, making a total of up to $50 for the allottee.

Eligible Applicants:

Federal, state, or local agencies, or private organizations having the capabilities to carry out the objectives of the program.

Primary Beneficiaries:

Persons 14 through 21 years old; citizens or permanent residents of the United States; school dropouts for three months or more; unable to find or hold an adequate job.

Available Program Data:

There were 22,400 continuing and 49,000 new Job Corps enrollees in FY 72 for a total of 71,400 enrollees. A total of 48,600 enrollees terminated; of these, 27,700 completed the program (57 percent) and 20,800 terminated before completion. Follow-up data on completers and noncompleters showed that approximately 35,000 persons found employment (72 percent of the total terminations).

Characteristics of the 49,000 new enrollees included these: 74.1 percent were male; 60 percent were 17 years old or younger; 29 percent were 18 to 19 years old; and 11 percent were 20 and 21 years old. Slightly more than 34 percent were white, 62.3 percent were black, 3.5 percent were other. About 10 percent were Spanish-speaking. Almost 30 percent had completed 8 years of school or less, 61.1 percent had completed 9 to 11 years; and 9.1 percent had completed 12 years or more. More than half (55.7 percent) had family income less than $3,000; 28.1 percent had family income from $3,000 to $4,999; and 16.3 percent had family income of $5,000 and over. All Job Corps enrollees were disadvantaged; 38.8 percent were public assistance recipients; 1.4 percent were veterans; and 5.3 percent were military rejectees. The Office of Management and Budget's Manpower special analysis data indicate that distribution of cost by type of service was: 10 percent for remedial education; 15 percent for skill training; 4 percent for health expenses; 10 percent for outreach, counseling, and placement; 18 percent for local program administration; 6 percent for other supportive services; 30 percent for allowances or wages; and 8 percent for federal program support.

In FY 72, there were 70 Job Corps Centers. The Women's Center at Tongue Point, Oregon, which was operated by the University of Oregon, was the only center operated by a postsecondary institution.

Federal Evaluations/Studies:

There have been several evaluation studies completed of the Job Corps program. Three of the more recent studies are discussed below.

Center for Naval Analyses (CNA) concluded in a study completed in 1972 that the program has provided a positive impact on the earnings capacity of the enrollees. Although assessment of the significance or the magnitude of this impact with existing data was found to be difficult, CNA determined that Job Corps appeared to have a greater impact than the other manpower programs serving disadvantaged youth.

The 1969 redirection from rural Conservation Centers and large "Urban" centers located some distance from a city to urban centers which were not strictly residential and drew their enrollees from the local population was carried out. It appears that the cost savings and benefit improvement to enrollees that were predicted to result from the new centers had not materialized. CNA found the data to indicate that the burden of proof is on the new centers to show that they will not be more expensive and produce fewer benefits than the old centers.

Since there is significant variation in enrollee achievement among the centers, the CNA study suggested finding out the reasons for the above average performance in some centers.

A Cost Effectiveness Analysis of the Job Corps by Howard Vincent, completed in 1972, summarized what is known about the performance of the Job Corps, especially since the program redirection of 1969. The study found that Job Corps enrollees continued to experience higher reading and mathematics achievement gains than did public school students. The old Job Corps Centers were found to have increased their enrollment and reduced their costs per man-month; but completion rates and wage rate gains of trainees declined. The author stated that new Job Corps Centers established after the 1969 redirection seem to have higher costs per man-month than the other centers, yet are at best only as effective as the older centers. The higher costs are probably due to more costly site locations, the smaller size of centers, and more expensive off-site training. The study found that the higher costs and low effectiveness could be partially explained by the relatively short time period the centers have been in operation.

A positive correlation between the length of time an enrollee remains in a Job Corps program and subsequent job placement, higher wage rates, and relocation of trainees outside of their original community was found to exist. Wage rates for trainees who stayed in the program for 20 months and over were still low, averaging $2.21 per hour in FY 71.

In comparison with other manpower programs serving a comparable population, the study concluded that the Job Corps is the most expensive program. These higher costs were attributed by the study to several factors: longer training period, added cost of residential and supportive services, and a smaller proportion of program completers. However, according to the author, Job Corps is one the few manpower programs which has produced sizable wage gains for enrollees.

A Survey of Ex-Job Corpsmen, conducted by Louis Harris and Associates, was based on interviews with two groups of corpspeople completed during the first three months of 1969. The first group consisted of 4,309 corpspeople who terminated approximately 6 to 8 months prior to April 1969. A total of 5,154 corpspeople who terminated approximately 12 to 15 months prior to April 1969 composed the second interview group.

Enrollees who had been terminated for six months showed a decrease of 21 percent in unemployment from their pre-Job Corps status to their current status. The percentage working increased from 33 percent pre-Job Corps to 41 percent post-Job Corps. Average hourly wages increased from $1.41 pre-program to $1.79 post-program. The data indicated no significant variance in wage increases or unemployment decreases among different racial groups. Age, however, proved to be a significant variable, with these enrollees over 20 years experiencing a 27 percent decrease in unemployment and 46 cents per hour wage increase compared to a 13 percent unemployment decrease and 16 cents an hour wage increase in the under-18 age group.

Higher wage increase rates were experienced by corpspeople trained at the Men's Conservation Centers (41 percent) than at the Men's Urban Centers (33 percent) or at the Women's Centers (31 percent). Not only did women experience a smaller wage increase rate, but they also earned significantly less than did the men in actual hourly wages ($1.55 for women, contrasted with about $1.85 for men).

Decreases in unemployment and wage increases were slightly greater for enrollees who had been terminated 12 to 15 months at the time of the interview than for those who had terminated six months prior to the interview.

The percentage decrease in unemployment was 27 percent and the hourly wage increase was 45 cents. The percentage working increased from 32 percent pre-Job Corps to 45 percent post-Job Corps and average hourly wages increased from $1.39 to $1.84, compared with a $1.79 hourly wage post-program for the first group. White enrollees experienced a greater reduction in unemployment (35 percent) than did black enrollees (23 percent). However, wage increases for both races were 44 cents per hour and actual wages post-program were only 3 cents higher per hour for white trainees.

Again, age proved to be a significant variable with older enrollees experiencing greater reductions in unemployment and higher wage gains. Like the women in the first group, women who had been terminated for 12 to 15 months experienced the smallest increase in hourly wages.

The instructors and athletic facilities at the centers were rated the highest by the trainees who had terminated six months prior to the interview. Amount of training allowance and the kind of trainees at the center received the lowest ratings, with less than half giving these categories positive ratings. Almost 70 percent found job training to be very helpful or somewhat helpful. Women found it to be more helpful than did the men. A majority (72 percent) responded that reading, mathematics and other classes were either very helpful or somewhat helpful.

Of the employers questioned, 19 percent rated corpspeople as excellent employees, and 46 percent rated them as pretty good. Only 11 percent rated them as poor, and 24 percent rated ex-corpspeople employees as only fair. Many (69 percent) of the employers stated that they were interested in hiring more corpspeople. Slightly more than 40 percent of the enrollees had received a pay raise, and only 1 percent had received a promotion.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

8, 27, 113, 122, 129.

MANPOWER RESEARCH AND DEVELOPMENT PROGRAM (17.217, 17.220)(a)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Manpower Development and Training Act of 1962, as amended through October 24, 1968, Title I, Sec. 102 (6); 42 U.S.C. 2571 et seq.; Economic Opportunity Act of 1964; 42 U.S.C. 2749 and 2763; Social Security Act, 81 Stat.888

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$21,643,000 est. PSE $ 5,370,209	$24,518,000 est. PSE $ 6,080,464(b)

Program Objectives and Operations:

To support manpower research, demonstration, and experimental studies needed to develop policy and programs for achieving the fullest utilization of the nation's manpower; to develop, through actual project operation, new ideas and improved techniques; and to demonstrate the effectiveness of specialized methods in meeting the manpower, employment, and training problems of particularly disadvantaged worker groups.

Eligible Applicants:

Academic institutions, state and local government organizations, and other organizations and individuals from all of the social science disciplines with research capabilities and qualifications required for fulfilling the objectives of the programs.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a)This program description combines activities found under Manpower Experimental and Demonstration Projects, (OMB Catalog #17.217) and Manpower Research Contracts (OMB Catalog #17.220).

(b)This estimated figure was derived by calculating the postsecondary percentage of the obligation amount and applying that same percentage to the total expenditures.

Available Program Data:

In FY 72, 53 awards were made to 33 universities. Researchers studied the Neighborhood Youth Corps program, alternate forms of public service employment, retention of participants in the Concentrated Employment Program, and various other manpower-related topics. Other specific projects included: an analysis of nonfarm employment problems of farm laborers; an investigation of the introduction of an organized system of training into the trucking industry; and a study on in-plant upgrading and mobility patterns.

Federal Evaluations/Studies:

The National Academy of Sciences is making a study of this program as part of an overall study of the Manpower Administration's entire research and development program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

118.

MANPOWER RESEARCH--DOCTORAL DISSERTATION GRANTS (17.218)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Manpower Development and Training Act of 1962, as amended; 42 U.S.C. 2571 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$404,200	$400,000 est.

Program Objectives and Operations:

To provide financial support for doctoral dissertation research in the manpower field.

Eligible Applicants:

Any academic institution offering doctoral degrees in areas of study which relate to the manpower field.

Primary Beneficiaries:

Any graduate student at the applicant academic institution who has completed all doctoral degree requirements except the dissertation in a field related to manpower.

Available Program Data:

In FY 72, 105 proposals for doctoral dissertation grants were received, and 37 were approved. A total of 36 dissertations were completed, almost all of which had been funded in previous years.

Federal Evaluations/Studies:

An ongoing study of this program is being made by the National Academy of Sciences, according to the Manpower Adminstration.

MANPOWER RESEARCH--INSTITUTIONAL GRANTS (17.219)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Manpower Development and Training Act of 1962, as amended; 42 U.S.C. 2571 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$899,954	$900,000 est.

Program Objectives and Operations:

To help academic institutions in strengthening their activities in the manpower field.

Eligible Applicants:

Institutions of higher education if they grant bachelor's or higher degrees in the social or behavioral sciences, in social work, or in any other disciplines relevant to manpower research.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 12 schools received grant funds. Each grant is for a four-year period and FY 72 was the third year of this cycle. Grant funds were used to support faculty and students participating in manpower courses, research and community service programs. Some schools used the funds to help finance forums for discussion of manpower programs and research projects.

Federal Evaluations/Studies:

The National Academy of Sciences is making a study of this program as part of an overall study of the Manpower Administration's research and development programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

118.

MANPOWER RESEARCH PROJECT GRANTS (SMALL GRANTS) (17.221)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Manpower Development and Training Act of 1962, as amended; 42 U.S.C. 2571 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$261,110	$260,000 est.

Program Objectives and Operations:

To broaden and strengthen National Manpower Research and Operating Program capability through grants to public and private nonprofit academic institutions and research organizations.

Research project grants support innovative or exploratory research projects or research-related activities in the manpower field.

Eligible Applicants:

Academic institutions and other public and private nonprofit organizations.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 62 proposals were received and 14 research grants were awarded, all to postsecondary institutions.

Federal Evaluations/Studies:

The National Academy of Sciences is studying this program as part of an overall study of the Manpower Administration's entire research and development program.

PUBLIC EMPLOYMENT PROGRAM (PEP) (17.229)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Emergency Employment Act of 1971, P.L. 92-54: 42 U.S.C. 4871-4883

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	\$975,870,000 PSE \$ 42,200,000(a)	\$567,030,000 \$ 23,000,000(a)

Program Objectives and Operations:

To provide public service employment for unemployed and underemployed persons and assist states and local communities in furnishing needed public services during periods of high unemployment.

At least 90 percent of funds provided to grant recipients must be expended for wages and employment benefits to persons employed in public service jobs under the program. A limited amount of funds can be used for program staff and administration and the remainder for training and other manpower services.

The program consists of regular and special employment assistance funds. Regular funds are available when the national rate of unemployment exceeds 4.5 percent for three or more consecutive months. At least 80 percent of the regular funds is apportioned to the states, based on (1) the proportion of the number of unemployed within the state to the number of unemployed nationally, and (2) a severity factor based on the proportion of the number unemployed over 4.5 percent within the state to that number nationally. Apportionments to program agents within the state are similarly made. Special funds are made available to areas which have at least 6 percent unemployment for three consecutive months. A nonfederal contribution of 10 percent in cash or in kind is required.

Eligible Applicants:

Units of federal, state, and local government; public agencies and institutions which are subdivisions of state or local government, and institutions of the federal government; Indian tribes on federal or state reservations. Units of federal and state governments are not eligible for special employment assistance funds.

(a) According to the Manpower Administration, this is an estimated figure of the funds that went to postsecondary institutions participating in this program. Any training provided from PEP funds was insignificant, according to the Manpower Administration.

Primary Beneficiaries:

Any unemployed or underemployed person.

Available Program Data:

In FY 72, approximately 4 percent of PEP jobs were at postsecondary institutions. The man-year cost for PEP employees in the education field was $6,700, while the per-participant cost was $2,050. In FY 72, there were an estimated 3,432 jobs affiliated with postsecondary institutions. Due to the turnover, there were more participants than jobs, since for one job there might be the original employee plus a replacement if he terminated before the end of the fiscal year. The estimated number of persons who were employed at some time during FY 72 at postsecondary institutions was 11,219. The Department of Labor was unable to provide statistics concerning the number of postsecondary institutions which participated in the PEP program. Any public postsecondary institution is eligible to participate in the program.

Federal Evaluations/Studies:

Two studies were prepared for the Senate Subcommittee on Employment, Manpower, and Poverty by Sar Levitan and Robert Taggert. The National Planning Association is evaluating the High Impact Demonstration Program of the Public Employment Program, with the evaluation expected to be completed by February 15, 1974.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

24, 25, 122.

WORK INCENTIVE PROGRAM--TRAINING AND ALLOWANCES (WIN) (17.226)

Federal Agency:

Labor: Manpower Administration

Authorizing Legislation:

Social Security Act of 1967 as amended, P.L. 90-248; 42 U.S.C. 602; Revenue Act of 1971; P.L. 92-178

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$183,852,000	$138,852,000

Program Objectives and Operations:

To move men, women, and out-of-school youth, age 16 or older, from the welfare rolls into meaningful, permanent, productive employment through appropriate training and related services.

This program is directed to recipients of Aid to Families with Dependent Children (AFDC). Services offered are: (1) placement or on-the-job training and follow-through supportive services; (2) work orientation, basic education, skill training, and work experience; and (3) placement in special work projects arranged by prior agreement with public or private nonprofit organizations. Employers hiring individuals participating in the program are eligible to receive a 20 percent tax credit on the first 12 months' wages or salary paid to the individuals.

Eligible Applicants:

State Employment Service offices.

Primary Beneficiaries:

Welfare recipients covered by AFDC program who are referred by welfare agencies to the local office of the State Employment Service.

Available Program Data:

In FY 72, 229,800 persons were enrolled in the WIN program. Of these, 109,200 were continuing and 120,600 were new enrollees. Of the 110,200 who terminated in FY 72, 33,300 (30 percent) completed the program and were placed in jobs, and 76,900 terminated early. Of the participants who enrolled in the program in FY 72, 39.8 percent were males. Ten percent were under 19 years of age; 17.8 percent were aged between 19 and 22 years; 67.5 percent from 22 to 44 years; and 4.8 percent over 45 years. Slightly over 60 percent of the new enrollees were white; 36.2 percent were black; 3.6 percent were other; 19.0 percent were Spanish-speaking. Almost 17 percent had completed 8 years of school or less, 41.1 percent had completed 9 to 11 years and 41.9 percent had completed 12 years or more. Almost 87 percent were heads of families, and 65.6 percent were primary wage earners. Almost 59 percent had family incomes of less than $3,000; 28.9 percent had family incomes from $3,000 to $4,999; and 12.3 percent had family incomes of $5,000 or more. About half (42.4 percent) had had less than three years of gainful employment; 37.2 percent, three to nine years; and 20.4 percent, 10 years or more. Prior to enrolling in WIN, 87.5 percent had been unemployed, and 4.3 percent had been underemployed. Of those unemployed, 69.4 percent had been so for 27 weeks or more. Almost 90.0 percent were disadvantaged; 98.6 percent were public assistance recipients; 6.2 percent were handicapped; 16.2 percent were veterans; and 2.6 percent were military rejectees.

Postsecondary institutions receive a portion of the funds with which they administer aspects of the WIN program. The Department of Labor was unable to provide the number of institutions and amount of funding which went only to postsecondary institutions.

Federal Evaluations/Studies:

Auerbach Associates, Inc. has recently completed a study of the WIN Program. Data on a nationally representative sample of approximately 4,000 WIN enrollees in 64 WIN projects were obtained by two methods: a structured questionnaire administered to the sample at three times (within three months of WIN enrollment, at or near termination, and at least four months after termination); and an analysis of WIN records of each sample enrollee between October, 1969 and March, 1970 and again in the period June-September, 1971.

The study found that the WIN enrollee population generally reflected demographic characteristics of the national AFDC population. There was less than a 5 percent difference in all ethnic categories between the AFDC and WIN populations, the WIN participants were slightly younger than the AFDC recipients, and WIN enrollees had a greater proportion of men (28 percent) than did the AFDC population (18 percent). At the time of the study, WIN participation was mandatory for male AFDC recipients. However, the Talmadge amendments have now made participation also mandatory for female recipients who have school-age children. The study concluded that the WIN population was appropriate under the 1969 WIN guidelines.

The national WIN enrollment consisted of 44.0 percent hard-core unemployed, 52.3 percent unemployed-in-need-of-employability help, and 3.6 percent job-ready enrollees. Nearly 37 percent of WIN enrollees obtained employment before terminating WIN; of these, 18 percent were placed by WIN services, and 18 percent found work on their own. Within six months after termination, 45.6 percent of the enrollees who had not found employment prior to termination were employed; by 12 months following termination, 57.0 percent of this group were working. The latter group of enrollees represented 35 percent of the total WIN population. A higher percentage of male enrollees (82 percent) were employed within 12 months after termination than were female enrollees (69 percent). WIN placed only 29 percent of the men and 18 percent of the women who found jobs during this period.

Of the 72 percent of the WIN enrollees who obtained jobs during the 12 months after WIN, 52 percent held those (or other) jobs on a regular basis, while the remaining 48 percent reported having a job but not holding it. Twelve months after termination from the program, 23.0 percent of those who were employed prior to termination and 15.2 percent of those who found employment after termination (38.2 percent of the entire WIN population) were still employed.

Nearly 74 percent of the national WIN population received some welfare assistance throughout the 12-month period following termination. Of the 74 percent who received welfare assistance, an average of 40 percent were working during the time. Moreover, an average of 22 percent (of the 74 percent) were stably employed. Of the 26 percent of the WIN enrollees not receiving welfare, 42 percent had found employment prior to termination and were stably employed; 31 percent had found employment following termination; and 27 percent were unemployed but not receiving AFDC grants because of other factors such as marriage, institutionalization, or other income sources.

The mean wage increase for WIN males who were employed prior to terminating was 15 cents per hour from a pre-WIN mean of $2.28 to $2.43 per hour, while those who found employment following termination showed a mean wage increase of 4 cents per hour, from $2.07 to $2.11 per hour. Females who were employed prior to termination experienced an increase of 53 cents per hour, from $1.45 to $1.98, while women who found employment after terminating gained 4 cents per hour, from $1.41 to $1.45 per hour. Nearly 40 percent of all employed males and 70 percent of all employed females earned less than $2.00 in their post-WIN employment.

Less than 6 percent of the WIN enrollees exhibited changes in educational level or basic employability characteristics. Changes in skill level, job quality, and work patterns were obtained by less than 20 percent of the participants. At the most, half of the participants who had health, child care, or other family problems received help from the WIN services. It appears that health problems led to termination only in severe cases, but a large portion of the child care and other personal problems led to termination.

Less than 23 percent of WIN participants were sent to any job interview. Of those sent to job interviews, 29 percent were sent to clerical jobs, 27 percent to service jobs, 7 percent to laborer jobs, and 11 percent to operative and sales jobs. Except for orientation, no more than 46 percent of the enrollees participated in a substantive component. Fewer enrollees were in the components which were more job-oriented. More than 60 percent of the participants experienced holding time; enrollees spent an average of 144 days in holding, nearly 40 percent of the average time of one year WIN participation.

Some changes in the WIN program are expected to occur due to the Talmadge Amendments, which require female AFDC recipients who have school-age children to participate. Public Service Employment Jobs (see p. 551). and On-the-Job Training were to be emphasized and receive additional training slots.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

117.

MANPOWER DEVELOPMENT AND TRAINING--INSTITUTIONAL TRAINING (17.215)

Federal Agency:

Labor: Manpower Administration; and HEW: Office of Education

Authorizing Legislation:

Manpower Development and Training Act of 1962, as amended, P.L. 90-636, 42 U.S.C. 2571-2670

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$355,708,000	$397,864,000 (a)

Program Objectives and Operations:

To provide classroom occupational training and related supportive services for unemployed and underemployed persons who cannot obtain appropriate full-time employment.

Formula grants go to the states, and the formula is based on apportionment factors required by P.L. 87-415, Section 301. State education agencies pay up to 10 percent of the cost of training, "in cash or in kind." No matching funds are required for allowance payments.

Eligible Applicants:

Individuals who are without employment or who are underemployed and who need training or retraining to gain employment. To receive regular training allowances, an applicant must be unemployed, head of household or member of a family in which head of household is unemployed, and must have a least one year's experience in gainful employment. Disadvantaged youth, age 17 to 21, may be eligible for youth allowances.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, there were a total of 212,100 participants, of whom 61,500 were continuing and 150,600 were new enrollees. Of the new enrollees, 35,500 participated in skill centers, and 17,000 participated in individual referral programs. There were 153,800 terminations that year, of which 111,400 were completions (72 percent) and 42,500 were early terminations. In FY 72, 81,500 enrollees were placed (53 percent of the terminations and

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(a) Includes carryover funds.

73 percent of the completions). Among the characteristics of new enrollees were: 63.2 percent were male; 10.6 percent were younger than 19 years; 27.3 percent were 19 to 21 years; 42.8 percent were 22 to 34 years; 11.6 percent were 35 to 44 years; and 7.7 percent were 45 years old and over. Approximately 61 percent were white; 33.1 percent were black; 5.7 percent were other. About 12.3 percent of the enrollees were Spanish-speaking. Four percent had completed less than 8 years of school; 5.7 percent had completed 8 years, 32 percent had completed from 8 to 11 years, 50.4 percent had completed 12 years, and 7.9 percent had completed over 12 years of school. Nearly 60 percent were the head of the household and 78.8 percent were the primary wage earner. Almost half (47.2 percent) had family incomes of less than $3,000; 27.2 percent had family incomes from $3,000 to $4,999; and 25.7 percent had family incomes of $5,000 and over. Just over 43 percent had been gainfully employed for less than three years; 39.4 percent had been employed for three to nine years; and 17.4 percent had been employed for 10 years or more. Prior to enrolling in this program, 72 percent had been unemployed and 12.2 percent were underemployed. Of those who had been unemployed, 36.9 percent had been so for 27 weeks or longer. About 66 percent were disadvantaged, 14.8 percent were public assistance recipients, 12.1 percent were handicapped, 31 percent were veterans, and 2.5 percent were military rejectees. According to the Office of Management and Budget (OMB) Manpower special analysis data, the distribution of cost by type of service was: 5 percent for remedial education, 35 percent for skill training, 6 percent for local program administration, and 54 percent for allowances or wages. Many of the institutional training centers were held at postsecondary institutions. The exact number is unavailable from the Department of Labor. This program does not appear as a separate item in the OMB 1973 Catalog of Domestic Assistance, but has been consolidated with other Manpower programs into the Manpower Revenue Sharing Program, OMB #17.232.

Federal Evaluations/Studies:

Data for the MDTA Outcomes Study, completed by Decision Making Information, were obtained primarily from 3,467 successful interviews of Manpower Development Training Act (MDTA) institutional trainees who terminated from the program in 1969.

Annual income was considered the single most important criterion in assessing the economic and vocational outcomes of the program. Trainees in the institutional program experienced a median gain in annual income of $1,876. Income increases resulted from a combination of higher wages, improved employment stability, and increased labor for participation.

Percentage hourly wage increases experienced by MDTA enrollees generally exceeded those of nonsupervisory production workers on private payrolls during the same period. Even though the post-training period was a time of rising unemployment rates, significantly higher employment levels were attained by institutional trainees than were experienced in pre-training. Increased labor force participation contributed more to this change than did greater employment stability or higher wages.

Disadvantaged enrollees experienced income gains more than double those of the nondisadvantaged, even though the latter had higher pre- and post-training incomes. Average income gains were almost three times higher for those who completed the program ($2,092) than for those who left before completion ($772). The longer the training was, the higher the average annual income gains. Spanish-Americans realized high income gains and blacks experienced the least gains. Those with a high school education obtained income gains more than double those of non-high school graduates ($2,336 and $1,002, respectively). Although women experienced slightly higher income gains, the median post-training income for those who were employed was significantly less than that of the men ($3,031, women, and $4,039, men). Absolute annual earnings were still very low for participants following training, with the median being $3,473.

Increase in the frequency of raises, promotions, and fringe benefits was considered another measure of impact of the MDTA program. Frequency of on-the-job promotions increased from 36 percent pre-training to 65 percent post-training, and frequency of raises increased from 10 percent to 20 percent. Also the number of participants working at jobs providing fringe benefits increased from less than half pre-training to 80 percent following training.

There are three basic types of institutional training: class-size groups; skill centers where training is accompanied by on-site orientation, counseling, placement, and other supportive services; and individual referrals where persons are referred to regular, ongoing school courses, the tuition being paid by MDTA. The greatest proportion of enrollees (72 percent) received training in the class-size group programs; 24 percent went to skill centers; and only 4 percent were individual referrals.

Individual referral enrollees obtained the highest income gains, followed by the skill centers. The referrals appeared to be effective in bringing into the labor force those who were previously outside it. This is largely due to the number of better-educated women who participated in this program. Skill centers were most effective for adding to the employment stability of those already in the labor force and for increasing wages.

When the effects of increased labor force participation are not considered, construction trades had the highest increase-in-annual-income ranking, followed by health services and machine trades. Basic education and other training components unrelated to skill training appeared to be effective in motivating those previously out of the labor force but seemed to induce little change in wages or in employment stability.

More than half of the enrollees entered the program with the expectation of learning a skill and getting a better job. Over 75 percent of the participants completed the training program. Rates of completion tended to increase as age and education increased. There were no significant differences in the completion rates of black and whites, between Spanish-Americans and others, nor between males and females.

Finding a job or illness were the most frequent reasons given for leaving the program before completion. Improvements in the program most frequently suggested were: longer training programs (14 percent); teach more advanced skills (10 percent); and provide more practical experience (8 percent).

The data suggested that longer training periods for fewer participants will produce greater gains in the long run. In conclusion, the study found the program to be surprisingly effective in its general objective of alleviating unemployment and increasing the income of the participants.

A report on "MDTA in Community Colleges" in American Association of Community and Junior Colleges, Bulletin of Occupational Education, Special Supplement, April 1973 and June-July 1973 found increased participation of community and junior colleges in MDTA programs to be desirable. It concluded that greater participation is contingent upon a reduction of barriers attributed to administrative guidelines or to the interpretation of these guidelines by state MDTA officials. Other barriers to the utilization of community colleges in particular communities are the individual community college interest and commitment to serving diverse populations.

Other evaluation studies of particular aspects of the Institutional Training program include: Olympus Research Corporation. Evaluation of The Effectiveness of Institutional Manpower Training in Meeting Employers' Needs in Skills Shortage Occupations. U.S. Department of Labor, Washington, D.C.: 1972 and Olympus Research Corporation. Evaluation of The MDTA Institutional Individual Referral Program, U.S. Department of Labor, Washington, D.C.: 1972.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

2, 95, 114, 116, 119, 122.

OCCUPATIONAL SAFETY AND HEALTH (17.500)

Federal Agency:

Labor: Occupational Safety and Health Administration

Authorizing Legislation:

Occupational Safety and Health Act, P.L. 91-173; Construction Safety Act, P.L. 91-54; Service Contract Act, P.L. 89-286; Maritime Safety Act, P.L. 75-718; Walsh-Healey Public Contracts Act, P.L. 74-846

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$2,294,000	PSE $2,294,000	PSE $1,375,000

Program Objectives and Operations:

To assure safe and healthful working conditions.

Eligible Applicants:

Employees, employers, organizations representing employers and employees, state and local governments, concerning occupational safety and health and federal and state programs.

State-designated agencies having federally approved plans may receive grants to administer and enforce state programs for occupational safety and health; states or political subdivisions may receive grants to develop and administer programs dealing with occupational safety and health statistics.

State and federal occupational safety and health personnel, employers, and employees.

Valid complaints by employees or representatives of employees of businesses affecting commerce, except those under the jurisdiction of other federal agencies.

Employees, employers, and general public.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 841 Occupational Safety and Health (OS&H) federal inspectors and industrial hygienists were trained, as well as 186 state OS&H inspectors and industrial hygienists. In addition, 37,452 employers and employees were trained.

The OS&H Training Institute in Chicago received $418,000 in FY 72.

Federal Evaluations/Studies:

There are no particular evaluations of this program.

U.S. POSTAL SERVICE

POSTAL ACADEMY PROGRAM (POSTAL STREET ACADEMIES) (18.001)

Federal Agency:

U.S. Postal Service

Authorizing Legislation:

5 U.S.C. 3301, 3302; Executive Order 15077; 3 CFR 1954-58

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite(a)	$3,144,786(b)	$3,144,786

Program Objectives and Operations:

To recruit and train underprivileged youth in the 16 to 22 age group who are school dropouts to enable them to qualify for employment in industry and government or for entrance into college.

Enrollees will accept job counseling and job placement where available plus academic training to achieve a high school equivalent education. Formula and matching requirements do not apply to this program.

Eligible Applicants:

Applicants must be 16 to 22 years old and be able to benefit from the services provided because of their present lack of employment, underemployment or incomplete education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a Postal Street Academy was established in the following six localities: Newark, New Jersey; San Francisco, California; Detroit, Michigan; Chicago, Illinois; Atlanta, Georgia; and the District of Columbia. A total of

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(a) Funds were not formally authorized for this program. Three federal agencies arranged for its financing out of their own budgets.

(b) These are total obligations which include funds from the Postal Service ($314,479), the Department of Labor ($702,907), and from the Department of Health, Education, and Welfare-MDTA ($2,127,400).

1,200 students, the majority of whom were black and from the inner city, were enrolled. The average age of the students was estimated to be 19 years, and males and females were represented roughly equally. The curriculums were all academically oriented.

This program ceased to operate after FY 73.

Federal Evaluations/Studies:

No evaluations of this program which would be available to the public have been done.

DEPARTMENT OF STATE

INSTITUTIONAL CENTERS TO AID FOREIGN DEVELOPMENT (211(d) INSTITUTIONAL GRANTS PROGRAM) (19.006)

Federal Agency:

State: Agency for International Development (AID)

Authorizing Legislation:

Foreign Assistance Act of 1966, Title II, Sec. 211(d); 797 U.S.C. 2171

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$5,195,000	(a)

Program Objectives and Operations:

To strengthen centers of competence within U.S. higher educational and research institutions, in order to develop and/or increase the reservoir of manpower, knowledge, and skills that can assist AID or other agencies with long-range economic and social developmental objectives in less developed countries. Grants are intended to augment an institution's own interests with potential to contribute to AID program or sector goals, by enabling the institution to build upon existing skills and knowledge.

Eligible Applicants:

Any U.S. institutions of higher learning, or research with competence in overseas development, involving certain development problem areas as defined by the agency.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Eleven institutional grants were made in FY 72, each one covering a five year period. Six were in agriculture, three in economics and social sciences and two in science and technology.

Federal Evalutions/Studies:

There are no published program evaluations.

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[a] According to AID, information concerning expenditure figures for this program is unavailable.

TECHNOLOGY APPLICATIONS FOR LESS-DEVELOPED COUNTRIES (CENTRAL RESEARCH) (19.007)

Federal Agency:

State: Agency for International Development (AID)

Authorizing Legislation:

Foreign Assistance Act of 1961, Title V, Sec. 241, 22 U.S.C. 2201, 2219

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$13,375,300(a)	(b)

Program Objectives and Operations:

To create and supply new information and methods in international development fields, which can be used to promote economic and social advancement in the less-developed countries of the world.

Eligible Applicants:

Any university, research foundation, or other qualified organization, which has the capability to understand overseas development problems, and to seek solutions through research techniques in the above stated scientific fields, is eligible to apply.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

A total of 34 contracts were awarded in FY 72: 14 in agriculture; four in health; five in nutrition; one in science and technology; and five each in population and in economics and social science.

Federal Evaluations/Studies:

There are no published program evaluations for this program.

(a) This figure includes $7,869,100 for population (Title X) funds authorized separately.

(b) According to AID, expenditure figures are unavailable.

EDUCATIONAL EXCHANGE--GRADUATE STUDENTS (FULBRIGHT-HAYS PROGRAM) (19.101)

Federal Agency:

State: Bureau of Educational and Cultural Affairs

Authorizing Legislation:

P.L. 87-256, as amended; 22 U.S.C. 2451 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,389,000(a)	$1,389,000(a)	$1,389,000(a)
$5,468,000(b)	$5,468,000(b)	$5,468,000(b)

Program Objectives and Operations:

To improve and strengthen international relations of the United States by promoting better mutual understanding among peoples of the world through educational exchanges.

Eligible Applicants:

Requirements for American students: 1) U.S. citizenship at the time of application; 2) with certain exceptions, B.A. degree or its equivalent before the beginning date of the grant; 3) candidates may not hold a doctoral degree at the time of application; 4) applicants must have received the majority of their high school and their undergraduate college education at educational institutions in the United States; 5) language proficiency sufficient to communicate with the people of the host country and to carry out the proposed study; 6) language proficiency is especially important for students wishing to undertake projects in the social sciences and the humanities; and 7) good health. Requirements for foreign nationals: they must make application through the binational educational commissions or American embassies in their home countries.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

For FY 72, the international exchange program awarded 332 grants to American graduate students to study abroad. These students went to 31 countries. Foreign graduate students received 1,210 grants; these students came from 79 countries. Two hundred and fourteen U.S. grantees went to Western Europe and 588 foreign grantees came from that area. No U.S. grantees went to Africa, but 61 foreign students came from there.

(a) Funds for U.S. students.

(b) Funds for foreign students.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

121.

EDUCATIONAL EXCHANGE--UNIVERSITY LECTURERS (PROFESSORS) AND RESEARCH SCHOLARS (FULBRIGHT-HAYS PROGRAM) (19.102)

Federal Agency:

State: Bureau of Educational and Cultural Affairs

Authorizing Legislation:

Public Law 87-256, as amended; 22 U.S.C. 2451 et seq..

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$4,873,000(a)	$4,873,000(a)	$4,873,000(a)
$ 605,000(b)	$ 605,000(b)	$ 605,000(b)
$ 934,000(c)	$ 934,000(c)	$ 934,000(c)
$1,126,000(d)	$1,126,000(d)	$1,126,000(d)

Program Objectives and Operations:

To improve and strengthen the international relations of the United States by promoting mutual understanding among the peoples of the world through educational exchanges.

Not mentioned in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance is the fact that the State Department also supports visiting lecturers, students, and research scholars from foreign countries.

Eligible Applicants:

(1) U.S. citizenship at the time of application. (2) For Lecturing: college or university teaching experience at the level for which the application is made. (3) For research: a doctoral degree, or in some fields, recognized professional standing as demonstrated by faculty rank, publications, compositions, concerts, etc.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a)Funds allocated and spent for U.S. lecturers.

(b)Funds allocated and spent for foreign lecturers.

(c)Funds allocated and spent for U.S. research scholars.

(d)Funds allocated and spent for foreign research scholars.

Available Program Data:

For FY 72, the international exchange program awarded 383 grants to American University lecturers, and 118 grants to American research scholars.

The U.S. lecturers went to 72 countries, and the U.S. research scholars went to 25 countries. A total of 107 foreign lecturers came from 38 countries and 454 foreign researchers came from 48 countries. Of the 383 U.S. lecturers, 111 went to Western Europe, 89 went to Latin America, and the others went to Africa, East Asia and the Pacific, Eastern Europe and the Near East and South Asia. Forty-nine foreign lecturers came from Western Europe, and the other foreign lecturers came from the areas already mentioned. Fifty-eight U.S. research scholars went to Western Europe; the other research scholars went to Latin America, East Asia and the Pacific, Eastern Europe, and the Near East and South Asia. The largest number of foreign research scholars (191) came from Western Europe, the rest of the foreign research scholars came from the other countries mentioned, as well as Africa.

Federal Evaluations/Studies:

There are no particular program evaluations.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

121.

DEPARTMENT OF TRANSPORTATION

TRANSPORTATION CONTRACT AWARDS TO EDUCATIONAL INSTITUTIONS(a)

Federal Agency:

Transportation: U.S. Coast Guard and other Transportation agencies

Authorizing Legislation:

49 U.S.C. 1353, 14 U.S.C. 93 and 94, 23 U.S.C. 307a and 403, and 49 U.S.C. 1605, 1631-1638, and 1657q

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$10,826,595	$10,826,595

Program Objectives and Operations:

To provide research, development, testing and evaluation in all fields of transportation.

Eligible Applicants:

Colleges and universities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, there were 114 new contracts awarded and 66 modifications made of previously awarded contracts. Almost half of these were for research in highway traffic safety. Other transportation agencies which awarded contracts were the Coast Guard, Federal Highway Administration, Railroad Administration, Federal Aviation Administration, the Transportation System Center and Urban Transit.

Federal Evaluations/Studies:

There have been no evaluation studies of these contract awards.

(a) This "program" does not appear in the Office of Management and Budget's *1972 Catalog of Federal Domestic Assistance*.

U.S. COAST GUARD ACADEMY[a]

Federal Agency:

Transportation: U.S. Coast Guard

Authorizing Legislation:

14 U.S.C. 181

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$12,000,000	$12,000,000

Program Objectives and Operations:

To provide a college education and train cadets for commissioning.

Tuition, room and board are provided for the cadets. Each cadet receives $300.45 per month for uniforms, books, materials and student activities. Upon graduation each cadet receives a commission and a Bachelor of Science degree. Graduates are obligated to serve for five years as a commissioned officer.

Eligible Applicants:

The U.S. Coast Guard Academy

Primary Beneficiaries:

Cadets at the Coast Guard Academy

Available Program Data:

The Coast Guard Academy is a public military school, located in New London, Connecticut. Approximately 1,000 males were enrolled in the Academy in FY 72. Students are admitted to the Academy exclusively on the basis of competitive examination. The age range of cadets is 17 to 25 years old, and 17 to 21 years for freshmen. The student body is predominately middle class and white with minority students composing 2.5 percent of the students in FY 72. (The Coast Guard reports that it is actively recruiting qualified minority students.)

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[a] This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance.

Federal Evaluations/Studies:

An evaluation study by the Human Resources Research Organization, entitled United States Coast Guard Academy Curricula: An Evaluation, will be published by December, 1973.

AIRPORT DEVELOPMENT AID PROGRAM (20.102)

Federal Agency:

Transportation: Federal Aviation Administration

Authorizing Legislation:

Airport and Airway Development Act of 1970; P.L. 91-258, 84 Stat. 219 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	\$2,572,114[a]	\$2,572,114[a]

Program Objectives and Operations:

To assist public agencies in the development of a nationwide system of public airports adequate to meet the needs of civil aeronautics.

Grants can be made for: (1) land acquisition; (2) site preparation; (3) construction, alteration, and repair of runways, taxiways, aprons, and roads within airport boundaries; (4) construction and installation of lighting utilities, navigational aids, and certain off-site work; and (5) safety equipment required for certification of airport facilities. Technical advisory services are also provided.

Eligible Applicants:

State, county, municipal, and other public agencies, if their airport requirements are shown in the National Airport System Plan.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, three grants were made to the following colleges and universities: University of Illinois; the trustees of Purdue University; and Ohio State University. The subjects of the grants were the improvement of airports--land, runway, lights and miscellaneous, and a Master Plan Study.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

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[a] These funds supported postsecondary education only.

AVIATION EDUCATION (20.100)

Federal Agency:

Transportation: Federal Aviation Administration

Authorizing Legislation:

Federal Aviation Act; P.L. 85-726; 49 U.S.C. 1301-1542, and Department of Transportation Act; P.L. 89-670; 49 U.S.C. 1651-1659

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$130,000 PSE $ 19,500[a]	$130,000 PSE $ 19,500[a]

Program Objectives and Operations:

To act as a focal point for elements of the education system, kindergarten through university, in all phases of aviation.

Relevant aviation education material and information of an educational nature for educators is provided. Assistance includes professional education consultation in relationship to aviation and aerospace education along with provision of sample programs developed by educators.

Eligible Applicants:

Any educator at all levels--local, county, city, state, regional, federal and international. Also, citizens interested in furthering aviation education in their community.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Approximately 600 postsecondary institutions received technical information in FY 72. In addition, 135 schools received consultation services concerning aviation programs at these schools.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a)Estimated

URBAN MASS TRANSPORTATION GRANTS FOR UNIVERSITY RESEARCH AND TRAINING (20.502)

Federal Agency:

Transportation: Urban Mass Transportation Administration

Authorizing Legislation:

Urban Mass Transportation Act of 1964 and related laws, as amended through October 15, 1970; P.L. 91-453 and 88-365; 78 Stat. 302; 49 U.S.C. 1601 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$2,646,349	$2,646,349

Program Objectives and Operations:

To assist in the establishment or continuation of comprehensive research in the problems of transportation in urban areas.

Eligible Applicants:

Public and private nonprofit institutions of higher learning.

Primary Beneficiaries:

Graduates and undergraduates attending the universities receiving the grants, as well as public and private nonprofit postsecondary institutions.

Available Program Data:

In FY 72, 80 applications were made for these grants and 33 grants were awarded to colleges and universities.

Federal Evaluations/Studies:

There are no national evaluations of this program currently available.

URBAN MASS TRANSPORTATION MANAGERIAL TRAINING GRANTS (20.503)

Federal Agency:

Transportation: Urban Mass Transportation Administration

Authorizing Legislation:

Urban Mass Transportation Act of 1964 and related laws, as amended through October 15, 1970; P.L. 91-453 and 88-365; 78 Stat. 302; 49 U.S.C. 1601 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Such sums as necessary	$440,000	$333,492

Program Objectives and Operations:

To provide fellowships for training of personnel employed in managerial, technical, and professional positions in the urban mass transportation field.

Fellowships are funded for not more than one year. Not more than 100 fellowships will be awarded in any one year. Funding may also be used for attendance at transportation seminars. Not more than 12.5 percent of the authorized fellowships shall be awarded to any one state.

Eligible Applicants:

Public bodies may apply for their own employees or for employees of urban transit companies operating in their areas.

Primary Beneficiaries:

Employees of public bodies or employees of private urban transit companies.

Available Program Data:

In FY 72, 100 fellowships were awarded. About 90 of the fellowship recipients attended the short course offered at Carnegie Mellon University or one of the two courses offered at Northeastern University. The remaining recipients attended various other colleges and universities. There were approximately five one-year fellowships awarded in FY 72.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

DEPARTMENT OF THE TREASURY

FUNDS FOR EISENHOWER COLLEGE(a)

Federal Agency:

Treasury, Bureau of Accounts

Authorizing Legislation:

P.L. 90-563

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(b)	$1,688,000	$1,688,000

Program Objectives and Operations:

To provide funds for construction of educational facilities at Eisenhower College, Seneca Falls, New York. These funds are provided by the federal government in honor of President Eisenhower. The grants are to match gift and other voluntary donations made to the college.

Eligible Applicants:

Eisenhower College.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Funds were used for the construction of educational facilities at the college. All of the $5,000,000 authorized for this purpose had been expended by the end of FY 73.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a) This funding "program" is not included in the 1972 Catalog of Federal Domestic Assistance, Office of Management and Budget.

(b) A total of $5,000,000 was authorized to be expended for this program, but no yearly authorization was designated.

ALCOHOL, TOBACCO, AND FIREARMS--TRAINING ASSISTANCE (21.052)

Federal Agency:

Treasury: Bureau of Alcohol, Tobacco, and Firearms

Authorizing Legislation:

Organic Act; Title I of the Gun Control Act of 1968; and Title XI of the Organized Crime Control Act of 1970

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$39,000	$39,000

Program Objectives and Operations:

To assure adequate knowledge of the Alcohol, Tobacco, Firearms, and Explosives laws and training for their enforcement by means of training state, county, and local law enforcement officers.

Instructors and lecturers are available for most police training programs in such areas as search and seizure, firearms, and explosives, enforcement, and other related investigative techniques. Instructional materials, including special firearms exhibits, may also be provided, as well as informational pamphlets on specific subjects. State, county, and local law enforcement officers may attend on a space-available basis the four-week training courses given to all new special agents of the Bureau of Alcohol, Tobacco, and Firearms. Formula, matching, or time phasing assistance requirements do not apply.

Eligible Applicants:

State, county, and local law enforcement agencies.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, about 200 state and local police officers received training in developing organized crime investigative skills. This training was conducted under an interagency agreement with the Law Enforcement Assistance Administration of the Department of Justice. It is estimated that between 40,000 and 50,000 participants attended the various lectures and seminars held in FY 72.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

TAX INFORMATION AND EDUCATION (21.003)

Federal Agency:

Treasury: Internal Revenue Service

Authorizing Legislation:

Internal Revenue Code, as amended; 26 U.S.C.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$250,000	$250,000

Program Objectives and Operations:

To assure that taxpayers and organizations which serve taxpayers receive the most current information on the tax obligations established by the federal tax system.

Tax institutes are conducted by district offices, usually between late November and April 15 for individuals who assist taxpayers in preparing their returns. Individuals and groups who participate in the institutes include: military personnel, college and adult volunteer tax assistance groups, junior and community college students taking business administration and accounting courses, tax return preparers, including advanced practitioners such as lawyers and certified public accountants and beginning preparers, and civic groups who then offer filing assistance at neighborhood assistance centers. High school and adult education teachers may write for updated packages of materials which enable them to present a complete federal income tax program. A self-instructional course is available to volunteers for assisting taxpayers through community action and other civic programs. Formulas, matching requirements, or time phasing of assistance do not apply.

Eligible Applicants:

Any individual or group interested in the tax system.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, courses including Armed Forces Institutes, Fundamentals of Tax Preparation, Teaching Business Taxes, General Institute for Tax Return Preparers, and Volunteer Income Tax Assistance were presented at the district and local levels. Courses are taught on a regular basis and updated annually. Estimates of the number of participants are not mentioned by the Department of the Treasury.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

SECRET SERVICE--TRAINING PROGRAMS (21.100)

Federal Agency:

Treasury: U.S. Secret Service

Authorizing Legislation:

18 U.S.C. 472-509, 3056

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$77,000	$77,000

Program Objectives and Operations:

To acquaint money handlers and law enforcement officials with the functions of the Secret Service and to train them in the techniques used in detecting counterfeit documents and money.

Representatives from state, county, and municipal police departments are accepted in limited numbers upon the request of their departmental heads for training in the Secret Service Questioned Document School. The training at the school, while geared primarily to the Secret Service special agent, will provide solid training in the fundamentals of document analysis with emphasis on handwriting examination and comparison. The Secret Service will provide state, county, and local police officials with information which will assist them in helping the Secret Service carry out its responsibilities. Formula and matching requirements do not apply to this program.

Eligible Applicants:

For training in the Questioned Document School, members of state or local police agencies. Private groups who handle money and are interested in techniques of detecting counterfeit currencies.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

During FY 72, 260 state and local police officers received training under this program.

Federal Evaluations/Studies:

No national evaluations of this program are available.

ACTION

UNIVERSITY YEAR FOR ACTION[a]

Federal Agency:

ACTION

Authorizing Legislation:

Economic Opportunity Act of 1964, as amended, Title VIII; Reorganization Plan No. 1 of 1970; P.L. 88-452; 42 U.S.C. 2991

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$4,281,000	$3,200,000[b]

Program Objectives and Operations:

To supplement efforts, through the use of local universities and colleges, to alleviate poverty by enabling persons to perform meaningful and constructive service as volunteers in situations where the application of human talent and dedication may help the poor overcome the handicaps of poverty and secure opportunities for self-advancement.

This program provides full-time volunteers who are willing to live and work with low-income communities. The volunteers live on allowances slightly below the level of those people whom they serve. Many volunteers, such as law students, health care students, architecture students, and business students contribute specific skills.

Volunteers are not to displace workers, nor shall a university supervising any volunteer program receive compensation for service of volunteers.

Eligible Applicants:

Sponsors applying for the University Year for Action (UYA) program must be local public or private colleges and universities. The project in which they propose to use the volunteers must be poverty-oriented. Volunteers must be 18 years of age or older.

Primary Beneficiaries:

Persons assisted by UYA activities must be low-income. There is usually not a direct beneficiary eligibility test, since in some cases volunteers may work with community groups which, while basically low-income, may include individuals not poor by government definition.

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[a] This program does not appear separately in the 1972 Catalog of Federal Domestic Assistance, Office of Management and Budget, but is included in the 1973 edition (#72.004)

[b] According to ACTION, this is an estimated figure for FY 72 expenditures.

Available Program Data:

In FY 72, 1,000 students participated in the UYA programs. The volunteers put in 567 man-years of work. The average age of a UYA volunteer was found to be 23.4 years; 25 percent of the volunteers were older than 25. A little over half of the UYA volunteers were juniors and seniors, with a third being sophomores and freshmen. The remainder (11 percent) were graduate students. In self-ranking, 88 percent of the volunteers placed themselves in the upper 60 percent of their class academically. Fourteen percent placed themselves in the upper 20 percent. A majority of the volunteers were liberal arts majors. Eighty percent of the UYA volunteers were liberal arts majors. Eighty percent of the UYA volunteers have been volunteers in the past, 52 percent as tutors for children and most of them in more than one activity.

Twenty-five colleges participated in the program. Predominantly poor families, with incomes of less than $10,000 were involved with the activities.

Federal Evaluations/Studies:

An evaluation, entitled University Year for Action, An Evaluation, written by Arlene Kringold, a consultant to ACTION, noted that volunteers received an average of 21 days of preservice training. When commenting on this training, the volunteers expressed a desire for two major types of training: personal skills and attitude development; and specific job skill training. While volunteers were generally satisfied with preservice training, it was inservice and on-the-job training which they valued most and which appeared to provide the skills they needed. Eighty-six percent of the volunteers received inservice training from the UYA program staff, university faculty, or other sources, including personnel of the agency to which they were assigned and residents of the community. Volunteer responses show they felt themselves making strong, positive progress during the year in: (1) understanding the causes and conditions of poverty; (2) understanding the workings of the agency to which they were assigned; and (3) mastering skills and techniques to do their jobs.

When given a list of ten possible motives for joining UYA, over 70 percent of the volunteers claimed their primary reasons were to "broaden experience" (53.0 percent) or "further career" (20.8 percent). In thinking about their careers, volunteers showed a strong inclination in favor of working with people and being useful to others, and demonstrated a search for self-improvement and an opportunity to exercise creativity. Choices of such goals as accumulating money, status in society, security, and enjoying admiration were rated only as fairly important.

According to the study, volunteers appeared to feel they made an effective contribution to the local community. At the conclusion of service, 84 percent of the volunteers stated that they had specific goals for their year's work. Forty-four percent stated they had accomplished that goal "completely," while 53 percent said they had met their goal "partially."

Each volunteer was assigned to a supervisor, usually a professional in a local social service or antipoverty agency who would oversee the volunteer's work. When supervisors were asked to rate the effectiveness of the volunteers, 52 percent rated the volunteers "excellent," while 33 percent rated their performance as "good."

One reason ACTION embarked upon a university-based volunteer program was the hope that a university would give volunteers not only moral and intellectual support for their work, but that this system would make additional resources available to people of low incomes. The evaluation showed these results:

1. A total of 127 sponsors had received the assistance of 1,842 part-time volunteers after the first six months of the program;

2. One-third of the volunteers reported that they recruited assistance from members of the faculty for their antipoverty agency;

3. Thirty-eight percent of the volunteers indicated that they had also secured equipment, material, and/or money to implement their projects.

During the first year of UYA, 61 percent of the agencies received assistance from the university. The greatest assistance was given as "program planning," followed by "tutoring and counseling."

UYA guidelines provided that volunteers should not be enrolled in classroom courses but should make normal academic progress through seminars, independent reading courses, and other learning methods. Credit would be earned in regular courses of the institution, specially designed courses, and in other special arrangements. Nearly all UYA volunteers received a full year's credit. A survey was taken of seven UYA schools and a limited sample of 30 volunteers participating in 80 courses. It was found that the students were enrolled in regular university courses 13 percent of the time, regular courses redesigned for UYA 45 percent of the time, and courses specially designed for UYA students 42 percent of the time.

In a separate survey of volunteers who had completed one year of service, 97 percent said they learned more from a year in UYA than in a comparable year of traditional education.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

23.

APPALACHIAN REGIONAL COMMISSION

APPALACHIAN STATE RESEARCH, TECHNICAL ASSISTANCE, AND DEMONSTRATION PROJECTS (STATE RESEARCH) (23.011)

Federal Agency:

Appalachian Regional Commission

Authorizing Legislation:

Appalachian Regional Development Act of 1965, Sec. 302, P.L. 89-4 as amended by P.L. 90-103, P.L. 91-123, and P.L. 92-65; 40 App. U.S.C. 302

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,500,000	$1,500,000

Program Objectives and Operations:

To expand the knowledge of the region to the fullest extent possible by means of state-sponsored research in order to assist the Commission in accomplishing the objectives of the Act.

Priority will be given to research of regionwide significance and application. States can carry out demonstrations in the fields of youth leadership, rural manpower training, and the health and safety of coal miners. Grant funds may be utilized for construction of necessary facilities incident to such activities.

Eligible Applicants:

Appalachian states alone or in combination with other Appalachian states.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In two years of operation, the Appalachian Regional Commission (ARC) has provided: 14 operational multicounty education agencies; four grants for planning education programs; and four education demonstrations in early childhood, career education, and education manpower. Inservice education planned and implemented by ARC multicounty agencies has provided needed inservice instruction to approximately 16,000 teachers in the small town areas of Appalachia. During FY 72, approximately 40,000 Appalachian students (K-12) directly received improved education services through ARC-financed programs. Approximately 294,000 were indirectly affected by the retraining of 16,000 of their teachers. Four Regional Education Demonstration programs have been in operation, including the New York Comprehensive Manpower Program, Project Leader at the University of

Tennessee, Regional In-Service Teacher Consortium in Erie, Pennsylvania, and the Tri-State Regional Resource Institute in Maryland. Through the ARC multicounty planning and operational grants, several states have enacted legislation setting up multicounty education agencies. Local, state, and federal contributions more than double the original ARC investment. Technical assistance from ARC and the Department of Health, Education, and Welfare is available to Appalachian states, universities, and local education agencies with at least two Technical Assistance visits to the region per month.

Federal Evaluations/Studies:

There were no national program evaluations available.

APPALACHIAN VOCATIONAL AND TECHNICAL EDUCATION DEMONSTRATION GRANTS (23.016)

Federal Agency:

Appalachian Regional Commission

Authorizing Legislation:

Appalachian Regional Development Act of 1965, Sec. 211(b), as amended by P.L. 92-65; 40 App. U.S.C. 211

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$1,000,000 PSE $ 400,000(a)	$1,000,000 PSE $ 400,000(a)

Program Objectives and Operations:

To assist in the expansion and improvement of educational opportunities and services for people in the Appalachian Region.

Funds may be utilized for planning, construction, equipment, and operation of publicly owned vocational and technical education demonstration projects.

Eligible Applicants:

States and local school boards.

Primary Beneficiaries:

The general public.

Available Program Data:

The Appalachian Regional Commission reports it is unable to provide data concerning these activities, beyond that noted in the Appalachian State Research, Technical Assistance, and Demonstration Projects, on p. 592.

Federal Evaluations/Studies:

No evaluations have been completed relating specifically to this program.

(a) This estimate was provided by the Senior Policy Advisor on Education, Appalachian Regional Commission.

APPALACHIAN VOCATIONAL EDUCATION FACILITIES AND OPERATIONS (23.012)

Federal Agency:

Appalachian Regional Commission

Authorizing Legislation:

Appalachian Regional Development Act of 1965, Sec. 211(a), P.L. 89-4, as amended by P.L. 90-103 and P.L. 92-65; 40 App. U.S.C. 211

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$24,000,000	$24,000,000

Program Objectives and Operations:

To provide the people of the region with the basic facilities, equipment, and operating funds for training and education necessary to obtain employment at their best capability for available job opportunities, and to meet the objectives stated under the program titled Appalachian Regional Development.

Funds may be utilized for construction, equipment, and operation of publicly owned vocational education facilities meeting the objectives stated above and the use and use restrictions detailed in the Appalachian Regional Development program.

Eligible Applicants:

States and the local school boards whose proposed facility is included in the state education plan. Most of the proposals are for regional vocational-technical centers serving multicounty areas as well as several school districts.

Primary Beneficiaries:

The general public.

Available Program Data:

The Appalachian Regional Commission reports that no further descriptive data, other than the general information found in the Appalachian State Research, Technical Assistance, and Demonstration Projects, on p. 592. is available.

Federal Evaluations/Studies:

No national evaluations of this program have been completed.

ATOMIC ENERGY COMMISSION

MOBILE RADIOISOTOPE LABORATORY (24.013)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919, 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$72,836	$72,836

Program Objectives and Operations:

To provide a training opportunity for faculty on small college campuses which lack nuclear laboratory equipment or facilities.

This program presents a two-week course of instruction, primarily for faculty, at small colleges lacking nuclear equipment and facilities through provision of mobile radioisotope laboratory and instructors. Maximum participation in laboratory sessions is limited to six or eight participants each section. Any number may attend lectures.

Eligible Applicants:

Any college in the United States.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 104 faculty and 139 undergraduate students participated in this program. Fourteen postsecondary institutions in seven states were involved. This program was terminated in FY 74, according to the Atomic Energy Commission.

Federal Evaluations/Studies:

There is no national evaluation of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--FACULTY RESEARCH PARTICIPATION (24.004)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Section 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$721,469	$721,469

Program Objectives and Operations:

To provide college and university science and engineering faculty with research training and experience in areas of nuclear research at Atomic Energy Commission (AEC) laboratories.

Work must be in an area of that laboratory's ongoing research, in which area the recipient desires training and from which he intends to introduce acquired techniques and information into the instructional program at his university. Participants are provided a stipend and a small travel allowance.

Eligible Applicants:

Engineering and science faculty at U.S. colleges and universities. U.S. citizenship required.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 214 faculty members participated in this program. A total of 144 institutions in 42 states and the District of Columbia held the programs.

Federal Evaluations/Studies:

There are no national program evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--FACULTY-STUDENT CONFERENCES (24.005)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$50,311	$50,311

Program Objectives and Operations:

To present new and advanced topics and developments in nuclear science and engineering to college and university science and engineering faculty and graduate students.

Eligible Applicants:

Faculty engaged in teaching in the nuclear field; and graduate students who have approximately one full year of graduate study in the nuclear field.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 67 faculty and 259 graduate students from 47 institutions in 16 states participated in the conferences. A typical conference consists of two one-week intensive programs of lecturers, seminars, and specialized discussions or laboratories and is presented at Argonne National Laboratory, Argonne, Illinois, each summer. Transportation and a small per diem allowance are provided to a limited number of participants.

Federal Evaluations/Studies:

There have been no national evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--FACULTY TRAINING INSTITUTES (SUMMER INSTITUTES) (24.007)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$401,629	$401,629

Program Objectives and Operations:

To train or to update the training of college science and engineering faculty in the nuclear aspects of their scientific disciplines.

Some institutes are jointly supported by the Atomic Energy Commission (AEC) and the National Science Foundation. AEC funds are used for administrative cost of the university or laboratory conducting the institute, and NSF funds are used for stipends to participants. In other instances, the AEC will provide both administrative costs and stipends.

Eligible Applicants:

Any U.S. institution of higher learning.

Primary Beneficiaries:

Any U.S. college or university science faculty member may apply to the host institution for selection as a participant.

Available Program Data:

In FY 72, 344 faculty participated in these institutes which were held at 20 institutions. Twenty states were active in the program.

Federal Evaluations/Studies:

There are no national evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--INSTRUCTIONAL ACTIVITIES[a]

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	[illegible]2 Obligations:	FY 72 Expenditures (Outlays):
(b)	$454,617	$454,617

Program Objectives and Operations:

To assist universities and colleges in enriching their science and engineering curriculums through the use of AEC laboratory equipment and facilities not normally available on a campus.

The program provides the opportunity for faculty and students to make use of AEC-owned facilities and equipment at a national laboratory.

Eligible Applicants:

Science and engineering faculty from U.S. postsecondary institutions who feel that the use of equipment at an AEC facility would be beneficial to themselves or their students.

Primary Beneficiaries:

Science or engineering faculty and their students.

Available Program Data:

In FY 72, 582 graduate and undergraduate students participated in this program, as well as 743 faculty members. Four hundred institutions in 36 states were involved in this program.

Federal Evaluations/Studies:

There are no national evaluations of this program.

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[a] This program combines the program activities of the Nuclear Education and Training--Faculty-Student Conferences (OMB #24.006) and Faculty Workshops (OMB #24.008). It is included in the FY 73 Catalog as #24.032.

[b] Authorizations for this program are a part of the Atomic Energy Commission's (AEC) annual authorization.

NUCLEAR EDUCATION AND TRAINING--LABORATORY GRADUATE PARTICIPANTS (24.010)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$403,632	$403,632

Program Objectives and Operations:

To help meet national manpower requirements for nuclear trained scientists and engineers at the M.S. and Ph.D. level.

Eligible Applicants:

M.S. or Ph.D candidates who have completed the university course work.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 87 graduate students were supported for their thesis or dissertation research by this program. A total of 38 colleges and universities in 26 states participated.

Federal Evaluations/Studies:

There have been no national evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--MATERIAL FOR NONPROFIT INSTITUTIONS (MATERIALS LOANS) (24.011)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$820,000	$820,000

Program Objectives and Operations:

To assist colleges and universities to acquire various materials needed for their nuclear science and engineering educational programs.

Nuclear materials are provided to educational institutions for use primarily for instructional purposes in regularly scheduled laboratory and lecture courses.

Eligible Applicants:

Colleges and universities.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 26 colleges and universities in 24 states participated in this program.

Federal Evaluations/Studies:

No national evaluations of this program have been completed.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--REACTOR FUEL CYCLE ASSISTANCE (24.016)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919, 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$407,197	$407,197

Program Objectives and Operations:

To provide assistance to universities in meeting lease charges and replacement costs for nuclear fuel used in research and training reactors.

Financial assistance for procurement of fuel and shipment of spent fuel is provided, as well as waiver of annual lease charges on fuel. This assistance is available only to nonprofit institutions of higher learning in the United States. No fuel cycle assistance can be provided for that portion of the reactor facility's acitivities performed or reserved for industrial or commercial concerns.

Eligible Applicants:

U.S. educational institutions owning nuclear reactors.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 15 higher education institutions in 14 states participated in this program.

Federal Evaluations/Studies:

There are no national evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--STUDENT RESEARCH PARTICIPATION (INCLUDING HONORS PROGRAM FOR SENIOR SCIENCE MAJORS) (24.009, 24.019)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sections 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$852,294	$852,294

Program Objectives and Operations:

Student Research Participation: To encourage well-qualified technicians and junior- and senior-level college students in science or engineering to go on to graduate study in nuclear fields by providing a research experience at an Atomic Energy Commission (AEC) laboratory. Subsistence and travel for research training at an AEC facility is provided. Participants are employed by the laboratory and engaged in a combination of on-going research and study at the laboratory.

Honors Program: To provide research experience beyond that normally available on college campuses to undergraduate science and engineering students of high ability. One semester honors program is presented each fall and spring term at both the Argonne National Laboratory, Argonne, Illinois, and the Brookhaven National Laboratory, Upton, New York. The program is composed of one-half time lecture-study and one-half time research participation in a laboratory research division. Areas covered by the program are chemistry, the life sciences, and physics. Mathematics and engineering majors with strong science minors can be accommodated within the above areas. Compensation is provided for added living expenses while in residence at Argonne.

Eligible Applicants:

Well-qualified technicians and junior- and senior-level college students in science or engineering are eligible. U.S. citizenship is required. For the honors program, the student must be nominated by his university, and be at senior-level in one of the areas of science mentioned.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 395 graduate and undergraduate students took part in these programs. Two hundred and sixty-four colleges and universities in 48 states, the District of Columbia, and Puerto Rico participated. Data separating these activities are not available from the AEC.

Federal Evaluations/Studies:

There are no national evaluations of these programs.

NUCLEAR EDUCATION AND TRAINING--UNIVERSITY REACTOR SHARING (24.021)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$55,800	$55,800

Program Objectives and Operations:

To provide U.S. colleges and universities without nuclear reactors the opportunity to use nuclear reactors at universities in their vicinity.

Reimbursement is made to an educational institution for the costs associated with sharing its reactor facility with other institutions for educational activities.

Eligible Applicants:

U.S. educational institutions having a nuclear reactor.

Primary Beneficiaries:

U.S. educational institutions without a nuclear reactor.

Available Program Data:

Ten colleges and universities in ten states participated in this program in FY 72, and utilized both graduate and undergraduate-level students.

Federal Evaluations/Studies:

There are no national evaluations of this program.

(a) Authorizations for this program are a part of the Atomic Energy Commission's annual authorization.

NUCLEAR EDUCATION AND TRAINING--USED NUCLEAR-TYPE EQUIPMENT GRANTS (24.022)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31(a) and (b), P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Not applicable	$574,820[a]	$574,820[a]

Program Objectives and Operations:

To assist U.S. colleges and universities equip their nuclear-science and engineering laboratories for instructional purposes.

Used equipment is donated to educational institutions for use primarily in nuclear-oriented educational programs in the life and physical sciences or engineering. Limited secondary use in nuclear research is permissible.

Eligible Applicants:

U.S. colleges and universities with scientific and engineering departments. The institution must offer courses of study at undergraduate or graduate level, with educational programs proposed related to nuclear science and technology. Faculty must be qualified by training and experience to conduct educational program proposed.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 31 colleges and universities in 22 states were involved in this program.

Federal Evaluations/Studies:

There are no national evaluations of this program.

(a)This figure represents the acquisition value of equipment donated.

NUCLEAR SCIENCE AND TECHNOLOGY--RESEARCH AND DEVELOPMENT (24.024)

Federal Agency:

Atomic Energy Commission

Authorizing Legislation:

Atomic Energy Act of 1954, as amended, Sec. 31, P.L. 83-703; 68 Stat. 919; 42 U.S.C. 2051

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	\$84,505,000(b)	\$84,505,000(b)

Program Objectives and Operations:

To provide financial support for basic and applied research and development to discover new knowledge in fields related to atomic energy or to develop certain aspects of the practical utilization of atomic energy.

Financial support, in whole or in part, may be provided for such purposes as salaries, materials and supplies, equipment, travel, publication costs and services required for conducting the research and development. Restrictions on the use of funds depend on contract provisions.

Support is provided for work in such fields as: biological, medical, and environmental sciences; applications of radioisotopes and radiation, and development of radioisotope production technology; nuclear reactor technology; space nuclear propulsion and space nuclear power systems; high-, medium-, and low-energy physics, mathematics, chemistry, metallurgy and materials; and controlled thermonuclear research.

Eligible Applicants:

Any educational institution, hospital, other nonprofit organization, individual, or industrial concern may submit a proposal requesting AEC support, under an appropriate contract or agreement.

(a) Authorizations for this program are a part of the Atomic Energy Commission's (AEC) annual authorization.

(b) These figures represent grants and contracts that are off-site, i.e., not at major AEC-owned research centers.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Approximately 2,550 graduate students participated in this program, which was held at approximately 150 institutions in 48 states during FY 72.

Federal Evaluations/Studies:

There are no national program evaluations available.

U.S. CIVIL SERVICE COMMISSION

INTERGOVERNMENTAL PERSONNEL GRANTS (27.012)

Federal Agency:

U.S. Civil Service Commission

Authorizing Legislation:

Intergovernmental Personnel Act of 1970, Titles II and III, P.L. 91-648

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$12,500,000	$12,500,000	$2,958,871
	PSE $ 181,235(a)	PSE $ 42,900(b)

Program Objectives and Operations:

To assist state and local governments to improve personnel administration with programs consistent with merit principles; and to train administrative, professional, and technical state and local government employees and officials.

At least 50 percent of the amount allocated to any state must directly benefit local governments. The amount of 80 percent of the total appropriated for grants each fiscal year will be allocated on the basis of an objective weighted formula which includes the factors of population and number of state and local government employees. The remaining 20 percent of the funds will be distributed at the discretion of the Commission.

Grants may represent up to 75 percent of the program costs initially and up to 50 percent after July 1975. No state, as a whole, may receive more than 12.5 percent of the total available funds.

Eligible Applicants:

Any state or group of states, organizations representing state or local governments, associations of state or local public officials and nonprofit organizations which provide requested services to governments, and any general local governments or combinations thereof. Local governments and government combinations are usually required to have a service population of 50,000.

(a) This PSE amount represents fellowship obligations and those funds obligated to universities. Other funds obligated to states supported education of personnel in colleges and universities. However, the exact amount was not available from the Civil Service Commission.

(b) This estimated figure was derived by calculating the postsecondary percentage of the obligation amount and applying that same percentage to the expenditure figure.

Primary Beneficiaries:

State of local governments or employees thereof.

Available Program Data:

In FY 72, six fellowships amounting to $37,229 in obligations were granted to the following state and local governments for study at the corresponding schools: California at University of California at Irvine; Los Angeles County at the Institute for Court Management at the University of Denver; Mobile, Alabama at Florida State University; District of Columbia government at the Institute for Court Management at the University of Denver; Florida at the University of Western Florida, and Puerto Rico at Rutgers University. An additional nine grants totaling $144,006 were made directly to colleges and universities for a variety of state and local government employees training and personnel development programs. There were many other training programs held at post-secondary institutions, however, the grants were originally made to the state or local governments and the Civil Service Commission did not have available data on the amount of funds or the number of institutions involved.

Federal Evaluations/Studies:

According to the U.S. Civil Service Commission, each fellowship has been evaluated by the office awarding the grant.

ENVIRONMENTAL PROTECTION AGENCY

RESEARCH AND DEVELOPMENT CONTRACTS TO EDUCATIONAL INSTITUTIONS(a)

Federal Agency:

Environmental Protection Agency, Offices of Air, Radiation, Research, Solid Waste, and Water Programs

Authorizing Legislation:

Clean Air Act as amended, Section 103 and 104; 42 U.S.C. 1857B and 1857b-1. Federal Water Pollution Control Act, as amended, Section 5, 6, 14, and 15; 33 U.S.C. 1155, 1156, 1164, and 1165. Public Health Service Act as amended; 42 U.S.C. 241 and 246. Solid Waste Disposal Act as amended, Section 204 and 205; 42 U.S.C. 3253.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$2,039,899	$2,635,000(b)

Program Objectives and Operations:

To provide for research and development in all fields of environmental study.

Eligible Applicants:

Colleges and universities

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, there were 33 contracts awarded to colleges and universities. Most of these awards were for research in air and water quality control. Other areas of study receiving support included noise, radiation, pesticides, solid waste management and water supplies.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a) This "program" was not included in the Office of Management and Budget's 1972 Catalog of Federal Domestic Assistance. Research contracts were awarded primarily to consulting firms and other research agencies.

(b) This is an estimated figure, calculated as suggested by agency officials.

AIR POLLUTION CONTROL--TECHNICAL TRAINING (66.006)

Federal Agency:

Environmental Protection Agency, Office of Air Programs

Authorizing Legislation:

Clean Air Act of 1963; P.L. 88-206, as amended; P.L. 91-604; 42 U.S.C. 1857c

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$1,043,458	$746,082

Program Objectives and Operations:

To provide technical training to personnel from state or local Air Pollution Control Agencies, to insure continued technical competence of state and local agency personnel, and to provide technical training of selected personnel from the federal government and industry.

Eligible Applicants:

Persons employed by state or local Air Pollution Control Agencies or otherwise qualified occupationally, and who meet the requirements of the particular course.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Approximately 130 air pollution control technical training courses involving about 600 course days of instruction were offered at 13 training centers in FY 72. About 1,630 students were trained through this program.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

AIR POLLUTION FELLOWSHIPS (66.002)

Federal Agency:

Environmental Protection Agency, Office of Air Programs

Authorizing Legislation:

Clean Air Act, Sec. 103, as amended; 42 U.S.C. 1857b

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$45,624	$64,252

Program Objectives and Operations:

To increase the number and competence of professional personnel engaged in research and other activities related to the prevention and abatement of air pollution.

Eligible Applicants:

Individual with a bachelor's degree or equivalent experience who has been accepted for admission by an appropriate educational institution.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Fellowships were awarded to 24 students at 16 universities in FY 72. Three of these students were female. Ten of the students were candidates for masters degrees, nine were candidates for the doctorate, two were enrolled in law programs and three were doing postdoctoral work.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

AIR POLLUTION MANPOWER TRAINING GRANTS (66.003)

Federal Agency:

Environmental Protection Agency, Office of Air Programs

Authorizing Legislation:

Clean Air Act, Sec. 103; 42 U.S.C. 1857b

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$213,552	$1,462,165

Program Objectives and Operations:

To assist public and other nonprofit institutions in establishing, expanding, or improving training opportunities for individuals interested in a career of air pollution control.

Eligible Applicants:

Public or private nonprofit institutions and air pollution control agencies.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 269 persons received air pollution graduate training grants. In addition, approximately 125 students were enrolled in the undergraduate specialty program. A total of eight private and 33 public colleges and universities participated in the program. A grant to Cooper Union supplemented the cost of course presentations but did not provide direct student support. Approximately 20 individuals graduated from that training program.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

RADIATION TRAINING GRANTS (66.201)

Federal Agency:

Environmental Protection Agency, Office of Radiation Programs

Authorizing Legislation:

Public Health Service Act, as amended, 42 U.S.C. 241, 243, and 246

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$343,601	$476,677

Program Objectives and Operations:

To support training of radiation protection specialists and technicians which will provide the necessary manpower capabilities to fulfill staffing requirements for protection of the public from environmental radiation.

Eligible Applicants:

Universities, hospitals, and other public and private nonprofit institutions. Individuals to be trained apply directly to the grantee.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

There were 55 graduate level student trainees in FY 72 at the following 13 universities: University of Florida, Northwestern University, Texas A&M University, University of Texas, Harvard University, University of Oklahoma, University of North Carolina, Rutgers University, Georgia Tech, New York University, University of Michigan, University of Minnesota, and Rensselaer.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

AIR POLLUTION CONTROL RESEARCH GRANTS (66.004)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Clean Air Act, Sec. 103 and 104, as amended; 42 U.S.C. 1857b and 1857b-1

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	\$4,823,200 PSE \$3,567,022(a)	\$5,343,770 PSE \$3,951,999(a)

Program Objectives and Operations:

To support research concerning environmental pollutants, including their ecological, economic, and social impact and development of control technology.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, state and local health departments, other public or private nonprofit institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 134 air pollution research control grants were made to colleges and universities.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a)These estimated figures were derived by calculating the postsecondary percentage of the awards made in FY 72 and applying that same percentage to the obligation and expenditure figures.

ENVIRONMENTAL PROTECTION--COMPREHENSIVE RESEARCH GRANTS (66.500)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Clean Air Act as amended, Sections 103 and 104; 42 U.S.C. 1857b and 1857b-1. Federal Water Pollution Control Act, as amended, Sections 5, 6, 14, and 15; 33 U.S.C. 1155, 1156, 1164, and 1165. Public Health Service Act as amended; 42 U.S.C. 241 and 246. Solid Waste Disposal Act as amended, Sections 204 and 205; 42 U.S.C. 3253

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$755,667 PSE $520,364 (a)	$60,000 PSE $41,316 (a)

Program Objectives and Operations:

To support basic social and economic research. The program also seeks to explore the impact of human activities which degrade the enviroment in terms of social, physical and economical costs, and to identify alternative approaches to environmental protection.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, state and local government departments, other public or private nonprofit institutions and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Four comprehensive research grants were awarded to the following universities in FY 72: Georgetown University, University of Chicago, University of Michigan, and the University of North Carolina.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a) These estimated figures were derived by calculating the postsecondary percentage of awards made in FY 72 and applying that same percentage to the obligation and expenditure figures.

PESTICIDES RESEARCH GRANTS (66.100)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Public Health Service Act, Sec. 301; 42 U.S.C. 241

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$544,456	$593,668
	PSE $507,929[a]	PSE $553,839[a]

Program Objectives and Operations:

To expand research activities related to human and environmental effects from pesticides, pesticide degradation products, and alternatives to pesticides.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, state and local government departments, other public or private nonprofit institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, ten pesticides research grants were awarded to colleges and universities.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

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[a] This estimated figure was derived by calculating the postsecondary percentage of the awards made in FY 72 and applying that same percentage to the obligation and expenditure figures.

RADIATION RESEARCH GRANTS (66.200)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Public Health Service Act, as amended; 42 U.S.C. 241 and 246

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$163,999	$222,797

Program Objectives and Operations:

To support research concerning environmental pollutants, including their ecological, economic, and social impact and development of control technology.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, other public or private nonprofit institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Six radiation research grants were awarded to colleges and universities in FY 72. The universities were: Colorado State University, University of Notre Dame, Cornell University, University of Oklahoma, and the University of Lisbon, Portugal. The University of Oklahoma received two awards.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

SOLID WASTE RESEARCH GRANTS (66.302)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Solid Waste Disposal Act, Section 204, as amended; 42 U.S.C. 3253

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$1,426,604 PSE $ 859,345(a)	$1,247,958 PSE $ 751,734(a)

Program Objectives and Operations:

To support research concerning environmental pollutants, including their ecological, economic, and social impact and the development of control technology.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, state and local government departments, other public or private nonprofit institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 30 research and development grants and three demonstration awards were made to colleges and universities.

Federal Evaluations/Studies:

There have been no national evaluation studies of this program.

(a) These estimated figures were derived by calculating the postsecondary percentage of awards made in FY 72 and applying that same percentage to the obligation and expenditure figures.

WATER POLLUTION CONTROL--RESEARCH, DEVELOPMENT, AND DEMONSTRATION (66.405)

Federal Agency:

Environmental Protection Agency, Office of Research and Monitoring

Authorizing Legislation:

Federal Water Pollution Control Act, Sec. 5 and 6, as amended; 33 U.S.C. 1155 and 1156

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$13,251,790 PSE $ 4,545,249 (a)	$10,106,108 PSE $ 3,466,307(a)

Program Objectives and Operations:

To support research concerning environmental pollutants, including their ecological, economic, and social impact and development of control technology.

Eligible Applicants:

Nonprofit institutions such as universities and colleges, hospitals, laboratories, state and local government departments, other public or private nonprofit institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 111 research and development awards and 14 demonstration grants were awarded to colleges and universities in the field of water pollution control.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

(a) These estimated figures were derived by calculating the postsecondary percentage of awards made in FY 72 and applying that same percentage to the obligation and expenditure figures.

SOLID WASTE TRAINING GRANTS (66.303)

Federal Agency:

Environmental Protection Agency, Office of Solid Waste Management Programs

Authorizing Legislation:

Solid Waste Disposal Act, Sec. 204 and 210, as amended; 42 U.S.C. 3253 and 3254d

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$215,428	$521,953

Program Objectives and Operations:

To develop, expand, or carry out programs for training persons for occupations involving management, supervision, design, operation, or maintenance of solid waste disposal and resource recovery equipment and facilities.

Eligible Applicants:

Any public or private nonprofit institution or agency.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 40 students received training grants. The following eight institutions participated in the progeam: The University of Wisconsin, University of Oklahoma, West Virginia University, Georgia Institute of Technology, University of Washington, University of Iowa, University of Southern California, and the University of Hawaii. All of the students were candidates for the master's degree.

Federal Evaluations/Studies:

There are no on-going evaluations relating specifically to this program.

WATER POLLUTION CONTROL--DIRECT TRAINING (WOD SHORT COURSE) (66.403)

Federal Agency:

Environmental Protection Agency, Office of Water Programs

Authorizing Legislation:

Federal Water Pollution Control Act; P.L. 84-660, Sec. 5(a)5; 5(g)(3)(c); 33 U.S.C. 466 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$926,045	$768,642

Program Objectives and Operations:

To develop, keep current, and present training courses in water pollution control to personnel of public agencies and other persons with suitable qualifications.

Eligible Applicants:

Persons employed by public water pollution control agencies or otherwise qualified occupationally, who meet the requirements of the particular course.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 73 course involving approximately 350 course days of instruction were offered at five regional training centers. About 1,630 students were trained.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

WATER POLLUTION CONTROL--RESEARCH FELLOWSHIPS (66.406)

Federal Agency:

Environmental Protection Agency, Office of Water Programs

Authorizing Legislation:

Water Pollution Control Act, Sec. 5(a)(4), as amended; 33 U.S.C. 1155 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$377,637	$320,898

Program Objectives and Operations:

To increase the number of specialists needed to carry out programs of water pollution control.

Eligible Applicants:

Qualified individuals with Master's degrees.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 107 grants were supported. Of these, 31 were new awards and 76 were fellowships active from past funding. It is estimated that three percent of the fellowship recipients were female and 15 percent were members of minority groups. The educational level of the fellows varied from postmasters to postdoctorate. The average support level was $5,387 for each new award. Recipients attended 29 universities and colleges in 27 states. The Environmental Protection Agency decided in FY 72 to phase out this program and to fund only those applicants whose research and training had already been judged to be of exceptional merit and to provide support to those already in the program until their completion. The program terminated in FY 73. In FY 73 a new fellowship program was devised and authorized to support advanced non-degree training of personnel in pollution control agencies.

Federal Evaluations/Studies:

Although the program has been evaluated by the agency staff, there have been no overall evaluations completed by an outside contractor.

WATER POLLUTION CONTROL TRAINING GRANTS (66.410)

Federal Agency:

Environmental Protection Agency, Office of Water Programs

Authorizing Legislation:

Water Pollution Control Act, Sec. 5, 16, 17, 18, and 19, as amended; 33 U.S.C. 1155 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$2,441,917	$3,680,255

Program Objectives and Operations:

To expand and improve training and education for professional, scientific, and technical personnel in the causes, control and prevention of water pollution.

Eligible Applicants:

Public and private agencies, educational institutions, and individuals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

A total of 1,241 graduate trainees and 94 undergraduate trainees participated in this program in FY 72. It is estimated that 85 percent of the graduate trainees were male and 10 percent were members of minority groups, while 96 percent of the undergraduate participants were male and 10 percent were members of minority groups. All graduate students were candidates for the masters degree, while 79 percent of the undergraduates were working for their associate degree and 21 percent were enrolled in bachelor degree programs.

Graduate trainees attended 84 institutions in 43 states while undergraduate trainees attended eight institutions in seven states. Undergraduate participants were trained to work as practical personnel in the field of waste treatment plant design. Graduate trainees will work in the field of water pollution control or water quality management.

Federal Evaluations/Studies:

There have been no evaluation studies of this program.

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

RESEARCH AND DEVELOPMENT IN SPACE SCIENCE AND TECHNOLOGY(a)

Federal Agency:

National Aeronautics and Space Administration

Authorizing Legislation:

National Aeronautics and Space Administration Act of 1958 as amended, P.L. 92-68; 42 U.S.C. 2451 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$2,603,200,000(b)	$119,001,190(c) $ 2,270,000(d)	$131,237,490(c) $ 2,270,000(d)

Program Objectives and Operations:

To further research in space science and technology. This research is vital to the advancement of space-related sciences and technology because it often suggests research which may produce new basic knowledge or applications of present knowledge.

Eligible Applicants:

Colleges and universities and other nonprofit institutions.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 219 domestic postsecondary institutions in 49 states participated in 1,574 projects. Research was conducted on a variety of subjects including physical sciences, mathematics, environmental sciences, engineering, and life sciences. In addition projects were conducted in eight institutions in the following foreign countries: Canada, Chile, Ecuador, Israel, Italy, New Zealand, and Peru.

(a) This Research and Development program is not included in the 1972 Catalog of Federal Domestic Assistance, Office of Management and Budget.

(b) This authorization includes all National Aeronautics and Space Administration (NASA) research and development.

(c) These monies are obligations or expenditures to domestic educational institutions.

(d) These monies are obligations or expenditures to foreign educational institutions.

Federal Evaluations/Studies:

There are no national evaluations of the overal NASA postsecondary education research efforts.

NATIONAL FOUNDATION ON THE ARTS AND HUMANTIES

PROMOTION OF THE ARTS--ARCHITECTURE AND ENVIRONMENTAL ARTS, DANCE, EDUCATION, EXPANSION ARTS, LITERATURE, MUSEUMS, MUSIC, SPECIAL PROJECTS, THEATRE, VISUAL ARTS, AND FEDERAL STATE PARTNERSHIP(a)

Federal Agency:

National Foundation on the Arts and the Humanities: National Endowment for the Arts

Authorizing Legislation:

National Foundation on the Arts and the Humanities Act of 1965; P.L. 89-209, as amended by P.L. 90-348 and P.L. 91-346; 20 U.S.C. 951 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$21,000,000(b)	$33,113,035(e)	$33,113,035(c)
$ 5,500,000(c)		
$ 3,500,000(d)		
$30,000,000 Total		

Program Objectives and Operations:

To make the arts more widely available; to preserve their cultural heritage for present and future generations; to strengthen cultural organizations; and to encourage the creative development of the nation's finest talent.

Annual Congressional Appropriations are divided into three general areas:

1. National Program Funds are made available for grants to individuals, cultural organizations, and state (and regional) arts agencies throughout the country.

2. Federal-State Partnership Funds are for the specific use of the 55 official state and territorial arts agencies. The amount

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(a) This description combines several programs in the FY 72 OMB Catalog identified by number as 45.001, 45.002, 45.003, 45.004, 45.005, 45.006, 45.007, 45.008, 45.009, 45.010, 45.011, and 45.012.

(b) National Program Funds

(c) Federal-State Partnership Funds

(d) Specially appropriated federal funds to match private donations given through the "Treasury Fund" Method

(e) These obligations and expenditures include private donations which match Treasury Funds.

appropriated is divided equally and granted on a matching basis to all eligible state and territorial arts agencies for programs within their own states or regions.

3. The Treasury Fund has legislation which allows the Endowment to accept private donations, match that amount, and award the doubled amount to a specified grantee, which must match this doubled amount. These grants go through the same review procedure as all other endowment grants.

Occasionally, other federal agencies transfer funds to the National Endowment for the Arts for special joint programs. In general, the Endowment does not give grants for deficit funding, capital improvements (construction), or purchase of permanent equipment; give general support grants; support travel or study abroad; or give tuition assistance for college or university study.

Eligible Applicants:

Individuals, state (and regional) art agencies and other nonprofit, tax-exempt organizations representing the highest quality in the fields of architecture and environmental arts, dance, education, expansion arts, crafts, literature, museums, music, public media (film, video, television, and radio), theatre, and the visual arts.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

The Endowment for the Arts sponsors twelve major programs involving funding to educational institutions and individuals connected to them.

1. The Architecture and Environmental Arts Program sponsored four activities in FY 72 including: (a) The Graduate Thesis Fellowship Program which awarded $28,500 in grants averaging $750 to an estimated 39 individuals in about 23 states. At least seven of these grantees were women. This program was discontinued in FY 73. (b) The Facilities for the Arts Program, which assists the development of art facilities, obligated $127,666 in the form of nine grants to various individuals and organizations. This program was discontinued in FY 73. (c) Forty grants worth $436,224 were distributed by the Professional Education and Development program through 27 organizations in 15 states and the District of Columbia. Included were 12 educational institutions in eight states and the District of Columbia. All grants were for the education and re-education of old and new professionals, especially for those in minority groups; and (d) The Public Education and Awareness program awarded grants totaling $192,772 for the development of environmental education programs for the public to 11 organizations and one individual in about nine states and the District of Columbia.

2. The Dance Program awarded $2,267,741 for the creation of new dance works and the support of workshops and conferences to mainly individuals as well as such institutions as arts councils, foundations, centers, etc. A total of $1,346,651 in matching funds were awarded to sponsors (including universities) of touring dance companies through touring programs. These dance companies provided a variety of services: master classes, lecture-demonstrations, workshops and teachers' classes, in addition to full performances.

3. The Education Program's $1,750,736 worth of funding activities included the distribution of $49,760 in matching grants to the University of California at Los Angeles, and Harvard College for fellowships to students studying arts administration. An Alternative Education Forms program sponsored grants for projects sponsored by educational institutions such as a printmaking program cosponsored by the National Collection of Fine Arts, Institute of Fine Printmaking and Federal City and Workshops for Careers in the Arts at George Washington University.

4. The Expansion Arts program, established to help growing numbers of professionally directed community arts groups whose primary concern is with the arts and arts-related activities, many of which involve ethnic and rural minorities with inadequately supported cultural activities, awarded grants totaling $1,137,088, $526,665 of which went to instruction and training projects in various art disciplines at about 35 institutions in 11 states and the District of Columbia.

5. The Literature Program distributed $636,050 in grants to four program areas, including $48,865 to Poets in Developing Colleges. Nine schools in eight states were involved.

6. Funds distributed by the entire Museum Program totaled $4,149,273. Special exhibitions at about 15 higher education institutions were assisted. Training in conservation involved $151,455 worth of grants at six institutions in five states, and Museum Training programs at six institutions in four states involved $118,745 in the form of matching grants.

7. The $9,745,797 that went into the Music program included $28,140 for "Jazz Concerts in Schools and Other Community Places" in about 13 states and the District of Columbia. Short-term Jazz Residences at Colleges, Universities, Music Schools, and other Cultural and Community Organizations involved $83,005 worth of awards to about 57 grantees in roughly 28 states and the District of Columbia. Special Projects in Jazz which distributed $86,420 included eight university participants in eight states. A total of $15,760 was distributed in the form of Travel-Study Fellowships for Jazz Musicians and Students, and $486,852 in private and federal money was obligated on matching basis by the Conservatory Program for training at eight conservatories of music in six states.

8. Out of $1,979,677 distributed in matching grants by the Public Media Program, $173,775 went towards Education activities for the development of curricula for film courses and support of workshops and seminars for film teacher training at 18 institutions in seven states and the District of Columbia.

9. Matching grants for the Special Projects Program provided for those projects that did not fit into the other described program areas. Grantees mainly included such organizations as state arts agencies, Regional Councils, Crafts organizations and other organizations dealing with interdisciplinary projects.

10. Funding activities of interest administered by the Theatre Program included Aid to Professional Theatre Companies, some of which involved services to schools. In FY 72, the total amount of assistance for professional theatre companies equaled $1,589,500.

11. The Visual Arts Program most relevant to educational institutions is the Artists, Critics, Photographers, and Craftsmen in Residence Program which, in FY 72, assisted 38 institutions in 21 states with $107,850 out of $940,504 for the entire Visual Arts Program. At least 28 higher education institutions participated in the short-term residence program, in which institutions selected and financed various artists, critics, photographers, and craftsmen of national reputation for lectures, seminars, and short courses.

12. The Federal State Partnership Program, which provides assistance to the official arts agency of each state, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and American Samoa, obligated $101,320 to each of the state councils and $65,000 each to American Samoa and Guam for a total of $5,500,000 in FY 72. Each arts agency awards its grants at its own discretion.

Federal Evaluations/Studies:

At the conclusion of the grant period, the Endowment requires final reports from all grantees for internal use, according to the National Endowment for the Arts.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

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PROMOTION OF THE HUMANITIES--FELLOWSHIP AND SUMMER STIPENDS FOR YOUNGER HUMANISTS, SENIOR FELLOWSHIPS, FELLOWSHIPS FOR GUIDED STUDY IN SELECTED FIELDS, FELLOWSHIPS FOR JUNIOR COLLEGE TEACHERS, FELLOWSHIPS FOR THE PROFESSIONS, EDUCATION PLANNING AND DEVELOPMENT, EDUCATION PROJECTS, MUSEUM PERSONNEL DEVELOPMENT, YOUTH GRANTS IN THE HUMANITIES, RESEARCH GRANTS AND SPECIAL PROJECTS(a)

Federal Agency:

National Foundation on the Arts and Humanities: National Endowment for the Humanities

Authorizing Legislation:

National Foundation on the Arts and Humanities Act of 1965; P.L. 89-209 as amended by P.L. 90-348 and P.L. 91-346; 20 U.S.C. 951-3

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$30,000,000(b)	$24,590,532(c)	$24,590,532(c)

Program Objectives and Operations:

To develop and use more effectively resources for a better knowledge and understanding of the humanities and the transmission of these capacities.

Grants may be used for study and research for purposes including the improvement of teaching, conducting experimental educational programs, holding conferences and teaching institutes, and various other types of educational, film, and community projects in the humanities. Costs for items such as travel, per diem, supplies, materials, rental of space and equipment, and personnel assistance related to these activities are also supported. Funds are not available for construction costs, museum or library acquisition, or purchase of permanent equipment. Funds are not awarded for tenure in schools or departments of divinity. Musical composition or performance, painting, writing of poetry or fiction, and other creative or performing activities in the arts are also excluded from Endowment support. Length of assistance varies from two months to five years, depending on the program. Formula and matching requirements exist for the Research Grants Program, the Education Planning and Development and Education Projects Programs.

(a) This description combines all programs numerically identified in the FY 72 OMB catalog as 45.102, 45.105 through 45.113, and 45.115.

(b) Of these funds, $26,500,000 were program monies and $3,500,000 were funds to match private donations.

(c) Total of all funds, including: ($5,289,078) All Fellowship and Summer Stipend recipients; ($183,600) Museum Personnel Development; ($119,480) Youth grants in the Humanities; ($7,150,440) Education Planning, Program, and Development; ($3,919,091) Education Projects; ($7,681,411) Research Grants; and ($247,132) Special Projects.

Eligible Applicants:

Depending on the particular program, eligible applicants include U.S. citizens, residents of U.S. territories, or foreign nationals affiliated with a U.S. institution; young professionals; persons who have completed graduate or other professional training within the last five years; experienced scholars, teachers, writers, or interpreters of the humanities who have produced significant original work.

Eligible institutions include nonprofit institutions such as museums, libraries, educational television stations, colleges and universities which encourage interdisciplinary and interprofessional programs, and foreign institutions affiliated with a U.S. institution or organization.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, the Endowment for the Humanities administered at least seven programs which provided support for certain activities of postsecondary institutions or were carried out through these schools.

1. Fellowship and summer stipend support aided 551 faculty members at various educational institutions. Female recipients numbered 100 and male recipients totaled 451. Two of the beneficiaries held baccalaureate degrees; 72 held masters' degrees; 471 had doctorates; three were bachelors of law; and degrees for three of these recipients were unknown.

2. The Museum Personnel Development program awards funds to institutions for a specific number of fellowships that will provide for the training of individuals serving on museum staffs. In FY 72, 34 students pursuing Master of Arts studies participated.

3. Of all Youth grants in the Humanities awarded, 25 went to students, 6 of whom were female and 19 of whom were male. The average age of these recipients was 24 years. Ten of these recipients were undergraduates; 12 had Bachelor of Arts degrees and three had Master of Arts degrees.

4. Among the programs for institutional beneficiaries administrated by the Endowment for the Humanities is the Education Planning and Development program. In FY 72, 50 institutions (one educational committee and 49 universities and colleges) received support. Educational institutions received a total of $7,120,783.

5. Grants for Higher Education Projects went to 95 institutions, 67 of which were colleges and universities. Ten of these schools (five public;

five private) were two-year colleges and 16 (6 public; 10 private) were four-year colleges. University grantees totaled 41, of which 28 were publicly and 13 were privately controlled. Educational institutions received a total of $2,921,438.

6. Research Grants supported 242 research projects through 216 institutions including 11 private educational organizations and 183 postsecondary schools.

7. The Special Projects Program awarded seven grants to a variety of nonprofit institutions, including several educational institutions.

Federal Evaluations/Studies:

No national evaluations are available to the public from the National Endowment for the Humanities.

NATIONAL GALLERY OF ART

NATIONAL GALLERY OF ART EXTENSION SERVICE (68.001)

Federal Agency:

National Gallery of Art

Authorizing Legislation:

20 U.S.C. 71-75

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Unavailable	$31,671(a)	$31,671(a)

Program Objectives and Operations:

To provide educational material including traveling exhibits, slide lectures, film strips, the humanities magazine "Art and Men," and motion pictures free of charge, except for transportation costs, to schools, colleges, and libraries across the nation.

Eligible Applicants:

Schools, colleges, libraries, and clubs.

Primary Beneficiaries:

General public and students at participating schools and colleges.

Available Program Data:

In FY 72, 4,356,814 people availed themselves of National Gallery Extension material and over 3,000 communities in 50 states used the extension service. Information concerning the number of postsecondary institutions which participated in this program is unavailable from the National Gallery, Extension Service.

Federal Evaluations/Studies:

There has been no comprehensive evaluation of this program.

(a)Excludes nonfederal funds for this activity.

NATIONAL SCIENCE FOUNDATION (NSF)

BIOLOGICAL SCIENCES RESEARCH PROJECT SUPPORT (47.002)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$54,001,038 PSE $48,168,926(b)	$54,001,038(c) PSE $48,168,926(b)

Program Objectives and Operations:

To initiate and support scientific research, including applied research, and to strengthen the scientific potential of the U.S. in the biological and medical sciences (excluding clinical aspects).

Grants may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, and other direct and indirect costs. Institutions are required to share in the cost of each research project and may do so by a contribution to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges and universities may apply on behalf of their staff members. Nonprofit, nonacademic research institutions and private profit organizations and unaffiliated scientists are eligible under special circumstances.

Primary Beneficiaries:

Scientists conducting the research.

(a) The authorization for several different NSF scientific research programs totals $271 million and cannot be separated.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

For FY 72, 89.2 percent of the obligated funds went to universities and colleges, and the remaining money was distributed to industry, federal laboratories, and other institutions. A total of 844 graduate students were supported, as well as 743 scientist man-years of effort. The average obligation amount per grant was $32,807, and 1,646 grants were distributed in the fields of cellular biology, ecology and systematic biology, physiological processes, molecular biology, psychobiology, and neurobiology.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

COMPUTER INNOVATION IN EDUCATION(a)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$8,400,000	$8,372,366	$8,372,366(c)
	$5,763,000(b)	$5,763,000(b)

Program Objectives and Operations:

To explore, test, develop, and evaluate computer technology and techniques which have potential for increasing the effectiveness and efficiency of the educational process.

Funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, publication costs, and other direct and indirect costs.

Eligible Applicants:

Colleges and universities, consortia of such institutions, and nonprofit research institutions may apply.

Primary Beneficiaries:

Investigators conducting the research.

(a) This program does not appear in the FY 72 OMB Catalog.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

In FY 72, 47 grants were awarded to test the use of computer technologies and techniques in instructional settings. Twenty-one awards were for computer-oriented curricular activities, 12 dealt with technology and systems, and the remainder were for special projects in the use of computer technologies and techniques in education.

Federal Evaluations/Studies:

A major national evaluation of two alternative methods of using computer-based educational systems is now under way, according to NSF.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

COMPUTING ACTIVITIES IN RESEARCH (47.003)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$17,500,000(a)	$12,543,602 PSE $11,540,113(b)	$12,543,602(c) PSE $11,540,113(b)

Program Objectives and Operations:

To advance the state of the art and contribute to fundamental understanding in computer science and engineering, and computer applications in research.

Funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, and other direct and indirect costs. Institutions are required to share in the cost of each research project, and this may be done by a contribution to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges, universities, consortia of such institutions, and nonprofit research institutions may apply.

Primary Beneficiaries:

Investigators conducting the research.

(a) Includes computer innovation in education. Funds for obligations and expenditures exclude these monies.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

In FY 72, 155 grants in the areas of computer science and engineering, computer applications in research, and computer impact on society were made, averaging $81,000. Universities and colleges received 92 percent of these funds, federal laboratories received 4 percent and other organizations the remaining 4 percent. A total of 166 scientist man-years were supported and 275 graduate students.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

ENGINEERING SCIENCES RESEARCH INITIATION GRANTS AND RESEARCH PROJECT SUPPORT (47.006, 47.007)[a]

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
[b]	$25,432,529 PSE $24,745,851[c]	$25,432,529[d] PSE $24,745,851[c]

Program Objectives and Operations:

To initiate and support scientific research, including applied research, to strengthen the scientific potential of the U.S. in the engineering sciences.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, and other direct and indirect costs. Institutions are required to share in the cost of each research project and may do so by a contribution to any cost element in the project, direct or indirect.

Eligible Applicants:

U.S. colleges and universities may apply on behalf of their staff members. In general, competition is limited to faculty members who received the Ph.D. degree within the previous two years.

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[a] As separate data are not available from NSF, these two OMB Catalog listings have been combined.

[b] The authorization for several different NSF scientific research programs totals $271 million and cannot be separated.

[c] This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

[d] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Nonprofit, nonacademic research institutions, private profit organizations, and unaffiliated scientists under special circumstances, are also eligible for Research Project Support.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, $25,432,529 was obligated for engineering research in the areas of electrical sciences and analysis, engineering chemistry, energetics, and engineering mechanics. A total of 663 grants, averaging $38,360 were awarded, supporting 311 scientist man-years and 1,048 graduate students. Universities and colleges received 97.3 percent of these funds; industry received 0.3 percent; federal laboratories, 0.4 percent; and other organizations, 2.0 percent.

Federal Evaluations/Studies:

There are no specific evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

Primary Beneficiaries:

Individuals involved in the project.

Available Program Data:

In FY 72, the Atmospheric Sciences program made 218 grants totaling $11,705,659 in obligations with an average grant of $53,696. These grants, in the areas of aeronomy, meterology, and solar-terrestrial studies, supported 273 graduate students and 134 scientist man-years of effort. Universities and colleges received 85.9 percent of these funds, industry 0.4 percent, and other organizations 13.7 percent.

The Earth Sciences program in FY 72 supported studies in the areas of geology, geochemistry, and geophysics, with obligations totaling $9,482,832 and average grants of $37,000. Universities and colleges received 94.4 percent of these monies, industry 0.1 percent, and other organizations 5.5 percent. Graduate students supported totaled 240, with 120 scientist man-years funded.

The Oceanography program in FY 72 obligated $12,550,143 in 272 grants averaging $46,140 in the areas of physical and chemical oceanography, submarine geology and geophysics, and biological oceanography. Approximately 96.3 percent of these funds went to universities and colleges, 2.4 percent to federal laboratories, and 1.3 percent to other organizations. One hundred and forty-two scientist man-years were supported as well as 247 graduate students.

Federal Evaluations/Studies:

No specific evaluations for these programs are currently available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

FELLOWSHIPS AND TRAINEESHIP PROGRAM (GRADUATE FELLOWSHIPS, NATO FELLOWSHIPS, AND GRADUATE TRAINEESHIPS IN SCIENCE) (47.009)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$20,339,901	$20,339,901(b)

Program Objectives and Operations:

To encourage excellence in the training of scientists needed by the nation to keep pace with rapid advances and to promote progress in science and technology.

Funds provide for fellowship or traineeship stipends and allowances and a fixed cost of education allowance to the fellowship or traineeship institution in most instances. There are no formula or matching requirements.

Eligible Applicants:

Graduate students and post doctoral scholars are eligible. In general, the applicant must be a U.S. citizen or national and hold a degree appropriately prerequisite to the level of study contemplated.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, a total of $9,897,278 was obligated by NSF Graduate Fellowships, supporting a total of 1,460 graduate students. Approximately, 500 new fellows are supported each year under this program.

(a) The authorization for this program is not separable from the total authorization for NSF science education programs, which equals $99,300,000.

(b) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Graduate Traineeships, now being phased out by NSF, received $10,442,623 in obligations during FY 72. A total of 1,806 traineeships were awarded, with 224 universities and colleges awarded funds under this program.

Federal Evaluations/Studies:

There have been no overall evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

32, 33.

INSTITUTIONAL GRANTS FOR SCIENCE (47.012)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$28,800,000[a]	$11,972,210	$11,972,210[b]

Program Objectives and Operations:

To help maintain a strong academic base for U.S. science by assisting institutions of higher education to follow their own plans and priorities, as indicated by local circumstances, through use of these funds for direct costs of research and science education.

Funds may be used at the discretion of the educational institution for the direct costs of research and science education activities. Funds may not be used for indirect costs. There are no formula or matching requirements.

Eligible Applicants:

Institutions of higher education in the U.S. or its territories and possessions which during FY 72 received a research award from any one of several federal departments or agencies. Grants made by NSF for research training under the programs of student-originated studies, undergraduate research participation, and research participation for college teachers, may also establish eligibility.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Includes the Science Development Program.

(b) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

In FY 72, 628 colleges and universities received Institutional Grants for science, ranging from about $1,000 to about $120,000 and averaging approximately $19,000. An estimated 4,000 graduate students were supported, as well as an estimated 1,550 scientist man-years.

Federal Evaluations/Studies:

There are no specific evaluacions of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

INSTRUCTIONAL PERSONNEL DEVELOPMENT (47.019, 47.032)[a]

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1975

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(b)	$26,555,000	$26,555,000[c]

Program Objectives and Operations:

To strengthen the teaching of science and mathematics in grades 7-12 through formal course work, laboratory and field work, and special courses and seminars on instructional problems, in order to produce a science-literate public and to motivate students to consider careers in science and related areas.

Grants also are provided to strengthen the teaching of science, mathematics, and engineering in technical institutes, junior colleges, and undergraduate institutions through formal course work and special courses and seminars on instructional problems.

Grants may be used for both operating costs and participant support, including stipends and dependency and travel allowances. There are no formula or matching requirements.

Eligible Applicants:

Proposals are submitted on behalf of their staff members by colleges and universities which grant at least a baccalaureate-level degree, and appropriate nonprofit organizations such as research institutes and laboratories.

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[a] Includes (1) Pre-college Academic Year, Inservice or Summer Institutes, and Short Courses, as well as (2) Undergraduate College Teacher programs, Summer Institutes, and Short Courses.

[b] The authorization for these programs is not separable from the total authorization for NSF science education programs, which equals $99,300,000.

[c] NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Primary Beneficiaries:

Prospective participants for the Pre-College program must be currently employed as teachers at least half-time in grades 7-12 and teach at least one course in science or mathematics or must be science or mathematics supervisors at the secondary school level. In addition, individual projects establish specific academic prerequisites for admission.

Prospective participants for the Undergraduate College Teacher Program must be a U.S. teacher of science, mathematices, or engineering at a college or a technical school or a junior or community college.

Available Program Data:

In FY 72, a total of 764 awards were made under these programs. The total funds requested in proposals for these programs was $101,702 in FY 72, with $26,555 actually being obligated in that year.

NSF does not separate its participant data between these instructional personnel development programs and the instructional program development programs

Federal Evaluations/Studies:

The analysis titled Evaluation of 1970 Summer Institutes for Secondary School Teachers of Sciences and Mathematics Programs, under the direction of Thomas Gibney, combined various kinds of data and contrasted separate institute types (e.g., social science institutes, sequential institutes, pooled implementation institutes, etc.) in a manner which maximized the useful information needed for NSF policy decisions. The study attempted to determine the impact of summer institutes on the professional activities and competence of the participants and focused on: (1) the changes in teaching practices (especially evidence of professional growth that could be directly attributed to attendance at a 1970 Summer Institute); (2) an inventory of educational needs as perceived by classroom teachers and supervisors for different disciplines; (3) the extent to which the participants' summer institute experiences met their perceived educational needs; (4) a comparison of the rankings of the 1970 Summer Institute objectives by institute directors with rankings by their participants; and (5) a record of the extent to which new curriculum projects were implemented into schools by the participants.

Information was obtained from questionnaires sent to all of the participants. The investigators felt that the return rate of 85 percent reflected the participants' continuing favorable attitude toward the Summer Institute program.

It was found that the age-sex distribution for institute subgroups showed marked differences in representation of males and females in various age categories. Among other observations, it was noted that for the mathematics institute, there was a decided peak of males 30 to 39 years old, while females of this age group showed the lowest number of participants. A markedly different trend was found in the 30-39 age group for science participants. In both discipline areas, the over-30 age group showed the highest ratios of female to male participants. It was also noted that relatively more institute participants fell into the 30-to-39 age group than occurred in the teacher population. In addition, it was found that senior high school teachers attended more advanced institutes than junior high teachers.

About 10 percent of the 1970 Summer Institutes could be described as "implementation institutes," which were primarily devoted to helping teachers implement a specific new curriculum into their classrooms and schools. More than two-thirds of the respondents to the questionnaires stated that the new curriculum materials had been put to use in their classrooms. About one-third of the respondents attended these institutes to help decide whether they should adopt the new curriculum.

Approximately one-third of the participants reported that a change in assignment or status had occured because of their institute attendance. In general, those who had attended implementation institutes had more changes in their professional duties and status than participants who attended non-implementation institutes.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

7, 32, 33.

INSTRUCTIONAL PROGRAM DEVELOPMENT (47.010, 47.020, 47.033)[a]

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(b)	$30,765,000	$30,765,000[c]

Program Objectives and Operations:

To bring about significant improvement in the instructional programs in science and mathematics in elementary and secondary schools and school systems through the local and regional cooperative efforts of colleges or universities. These grants may provide for the cost of planning and development of the project, testing of materials, special instruction for key teachers and staff, revisions and adaptations, demonstration classes, writing conferences, etc.

For the Undergraduate program, the purpose is to improve instruction in science in technical schools, junior colleges, and colleges, through development of new courses, course segments. techniques, and equipment. Grant funds may be used for both operating costs and participant support in specific instances. For the Undergraduate Instructional Scientific Equipment Program, NSF provides not more than 50 percent of the total project funds. There are no formula or matching requirements for any of the other programs.

For the Graduate program, the purpose is to upgrade the quality of science instruction at the graduate level and identify and support new and creative approaches to graduate instruction as well as a broadened public understanding of science. Grants may be used for both operating costs and participant support through stipends and dependency and travel allowances. There are no formula or matching requirements.

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[a] Includes: (1) Pre-College programs, such as Cooperative College-School Science (CCSS) Projects and Course Content Improvement (CCI) Projects; (2) Undergraduate programs such as the Science Course Improvement, College Science Improvement, Preservice Teacher Education, Technician Education Development and Undergraduate Instructional Scientific Equipment programs; and (3) Graduate programs, such as the Advanced Science Education program.

[b] The authorization for these programs is not separable from the total authorization for the NSF science education programs, which equals $99,300,000.

[c] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Eligible Applicants:

Proposals are submitted on behalf of their staff members by colleges and universities which grant at least a baccalaureate-level degree, and by appropriate nonprofit organizations such as research institutes and laboratories.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 789 awards were made in these various areas of Instructional Program Development. The total amount proposed was $119,169,000, while $30,765,000 was actually obligated in that year.

NSF does not separate participant data between these instructional program development programs and the instructional personnel development programs (see p. 662).

Total participants in all NSF Pre-College Education programs numbered 55,029, while 8,311 participated in the Undergraduate Education programs, and 1,922 participated in the Graduate Education programs, excluding holders of NSF Graduate Fellowships.

Federal Evaluations/Studies:

There have been no national evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

32, 33.

INTERGOVERNMENTAL SCIENCE PROGRAMS (47.036)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$1,000,000	$1,078,003 PSE $ 301,841(a)	$1,078,003(b) PSE $ 301,841(a)

Program Objectives and Operations:

To advance understanding of public issues and problems having scientific and technological content at state and local levels of government and to assess needs and opportunities for effective application of science and technology.

Funds may be used for paying costs, such as salaries and wages, expendable equipment and supplies, travel, publication costs, other direct costs, and indirect costs considered necessary to conduct research, studies, or demonstration activities. Applicants are usually required to share in the cost of the proposed activity and may do so by contributing to any cost element in the project, direct or indirect.

Eligible Applicants:

Units of state and local government and their regional organizations, special governmental districts, legislatures, schools of law and other professions, state academies of science, colleges and universities (including community colleges), and nonprofit organizations and institutions may submit proposals. While joint proposals from academic institutions in association with a unit of government are given special consideration, awards may be made under other organizational arrangements.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(b) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

For FY 72, 28 percent of funds obligated under this program went to universities and colleges. Two grants were made to these schools, with eight scientist man-years supported. A total of 43 awards were distributed, averaging $25,070.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

INTERNATIONAL COOPERATIVE SCIENTIFIC ACTIVITIES (47.014)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$4,000,000(a)	$3,067,413 PSE $1,196,907(b)	$3,067,413(c) PSE $1,196,907(b)

Program Objectives and Operations:

To strengthen and promote professional communication and collaboration between U.S. and foreign scientists.

Funds are provided for U.S. scholars to study abroad to conduct research, to travel to special scientific meetings, and to engage in joint research projects with foreign organizations. Funds also support scientific conferences. On bilateral research projects, funds are contributed from both countries.

Eligible Applicants:

For United States -- Australia, Brazil, China, Italy, Japan, and East European programs, proposals for grants may be submitted by U.S. colleges and universities, nonprofit scientific organizations, and individual scientists; also for the United States, Australia, Italy, Japan, and East European programs applications requesting no financial assistance may be submitted by U.S. agencies and nonprofit organizations. For the United States--French, Indian, and East European exchanges, applications may be submitted by U.S. scientists. For exchanges with the U.S.S.R., Poland, Yugoslavia, Romania, Hungary, Czechoslovakia, and Bulgaria, U.S. scientists may submit applications to the National Academy of Sciences.

(a) Authorization also includes funds for the International Travel Program and the International Institute for Applied Systems Analysis.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under these programs and applying those percentages to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Both the Cooperative Science program and the Scientific Organizations and Resources program are included under this Catalog listing for FY 72.

Under the Cooperative Science program, 100 grants were made, totaling $2,488,756 and averaging $24,887. These funds were distributed as follows: universities and colleges, 46 percent; federal laboratories, 2 percent; and other organizations and agencies, 52 percent. A total of 116 scientist man-years were supported with these monies, as well as two graduate students.

The Scientific Organizations and Resources program made 13 grants in FY 72 for a total of $578,657 in obligations. Average grants were $44,513 with universities and colleges receiving 9 percent of these funds and other organizations and agencies receiving the remaining 91 percent. No graduate students or scientist man-years were supported under this program.

Federal Evaluations/Studies:

No national evaluations have been done on these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

INTERNATIONAL DECADE OF OCEAN EXPLORATION (IDOE OR OCEAN DECADE PROGRAM) (47.037)

Federal Agency:

NSF

Authorizing Legislation:

Designation of National Science Foundation as lead agency for the International Decade of Ocean Exploration by the Vice President per announcement of October 19, 1969; by letter of November 17, 1969 to the Director, NSF. National Science Foundation Act of 1950, amendments through July 1968, P.L. 81-507.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$20,000,000	$19,671,443 PSE $13,809,353[a]	$19,671,443[b] PSE $13,809,353[a]

Program Objectives and Operations:

To accelerate understanding of the ocean; to encourage and enable nations cooperatively to develop scientific understanding of the ocean as a system; and to provide knowledge about environmental quality, environmental forecasting, seabed assessment, and living resources to benefit mankind in his management and use of the oceans.

Funds may be used for salaries of principal investigator(s) and for professional, technical, and clerical assistance, fringe benefits, permanent and expendable equipment and supplies, foreign and domestic travel, publication of research results, computer rental charges, other direct costs, established indirect costs, and fees or profits (in contracts), in accordance with the approved budget. Institutions are required to share in the cost of each research project and may do so by a contribution to any cost element in the project, direct or indirect.

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[a] This estimated figure was derived by using the National Science Foundation (NSF) percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

[b] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Eligible Applicants:

Colleges, universities, nonprofit research institutions, industry, and consortia of any or all of these organizations.

Primary Beneficiaries:

Beneficiaries are those persons involved in the project.

Available Program Data:

In FY 72, 102 grants totaling $19,671,443 in obligations were awarded in the areas of environmental forecasting, environmental quality, seabed assessment, living resources, and general support in the IDOE program. Grants averaged $192,857, with 70.2 percent of the funds going to universities and colleges, 16.6 percent to industry as subcontracts from academic institutions and federal agencies, 11.9 percent to federal laboratories, and 1.3 percent to other agencies and organizations. A total of 174 senior scientist man-years were supported, as well as 54 graduate students.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

INTERNATIONAL TRAVEL PROGRAM (47.015)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$465,699	$465,699(c)
	PSE $395,844(b)	PSE $395,844(b)

Program Objectives and Operations:

To strengthen and promote professional communication and collaboration between U.S. and foreign scientists.

Funds are provided for U.S. scientists to attend international meetings and seminars abroad; cooperate in international scientific activities; and exchange scientific information. Travel must be by U.S.-flag carriers. Funds may not be supplemented from other federal sources. Formula and matching requirements are not applicable.

Eligible Applicants:

Applications for grants may be submitted by individual U.S. scientists and by U.S. nonprofit organizations (usually professional societies). Selections are made on a competitive basis.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Funds authorized for this program are included under International Cooperative Scientific Activities, p. 669.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

For FY 72, 590 grants were awarded, averaging $789. Colleges and universities received 85 percent of these funds, while the remaining 15 percent of the monies went to other agencies and organizations. A total of 18.6 scientist man-years were supported, but no graduate students received funds under this program.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

MATERIALS RESEARCH PROJECT SUPPORT (MATERIALS RESEARCH) (47.040)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
[a]	$33,394,568	$33,394,568[c]
	PSE $33,327,779[b]	PSE $33,327,779[b]

Program Objectives and Operations:

To initiate and support scientific research, including applied research, to strengthen scientific potential of the U.S. in Materials Sciences.

Funds may be used for paying costs considered necessary to conduct research or studies, such as publication costs, other direct costs, and indirect costs. Institutions are required to share in the cost of each research project and may do so by contributing to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges and universities may apply on behalf of their staff members. Nonprofit nonacademic research institutions, private profit organizations and unaffiliated scientists under special circumstances, are also eligible.

Primary Beneficiaries:

Beneficiaries are those persons conducting the research.

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[a] The authorization for several different NSF scientific research programs totals $271 million and cannot be separated.

[b] This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

[c] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

For FY 72, 389 grants were awarded, with the average grant amounting to $85,847. Approximately 99.8 percent of the funds were distributed to colleges and universities, and 0.2 percent went to other organizations. A total of 1,050 graduate students were supported, and 412 scientist man-years were completed with these funds.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

MATHEMATICAL AND PHYSICAL SCIENCES RESEARCH PROJECT SUPPORT (47.016)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	\$79,553,263 PSE \$78,426,604 (b)	\$79,553,263 (c) PSE \$78,426,604 (b)

Program Objectives and Operations:

To initiate and support scientific research, including applied research, to strengthen the scientific potential of the U.S. in the mathematical and physical sciences.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, and other direct and indirect costs. Institutions are required to share in the cost of each research project and may do so by a contribution to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges and universities may apply on behalf of their staff members. Nonprofit nonacademic research institutions, private profit organizations and unaffiliated scientists under special circumstances are also eligible.

Primary Beneficiaries:

Beneficiaries are those investigators conducting the research.

(a) The authorization for several different NSF scientific research programs totals \$271 million and cannot be separated.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under these programs and applying those percentates to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

This OMB Catalog listing actually combines four NSF research project support programs in the fields of physics, chemistry, astronomy, and mathematics. Each is described separately below.

A total of $33,276,917 was obligated during FY 72 in support of physics research in the areas of elementary particle, nuclear, atomic, molecular and plasma, theoretical, and gravitational physics. Two hundred and seventy-two grants were made that year, averaging $122,342. Universities and colleges received 99.1 percent of these funds, federal laboratories 0.1 percent, and other organizations 0.8 percent. Graduate students supported under this program numbered 577, while 398 scientist man-years of effort were accomplished.

In the chemistry research program, $24,521,802 was obligated through 632 grants in eight different areas of chemistry research. These grants averaged $38,800 and supported 866 graduate students and 505 scientist man-years. Universities and colleges received 99.8 percent of these funds, with other agencies receiving the remaining 0.2 percent.

Solar system astronomy, stars, and stellar evolution, stellar systems and motions, galactic and extragalactic astronomy, and astronomical instrumentation and development were areas receiving FY 72 funds in the astronomy research program. Obligations for 135 grants, averaging $59,320 each, totaled $8,003,244. Universities and colleges received 92 percent of these funds, with other organizations receiving the 8 percent remainder. Eighty-six scientist man-years were supported, as well as 163 graduate students.

A total of $13,746,300 was obligated in the mathematical sciences program, funding 693 grants in the areas of classical analysis and geometry, topology and foundations, applied mathematics and statistics, modern analysis and probability, and algebra. Grants averaged $19,836, with 99 percent of the monies going to universities and colleges and 1 percent to other organizations. Scientist man-years supported totaled 287, while 296 graduate students also received support.

In sum, $79,553,263 was obligated for these programs, supporting 1,899 graduate students and 1,276 scientist man-years.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

NATIONAL AND SPECIAL RESEARCH PROGRAMS (47.017)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C., 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$12,500,000	$11,834,638 PSE $ 8,804,971 (a)	$11,834,638 (b) PSE $ 8,804,971 (a)

Program Objectives and Operations:

To initiate and support the International Biological Program and the Global Atmospheric Research Program.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supples, travel, publication costs, other direct costs, and indirect costs. Institutions are required to share in the cost of each research project and may do so by contributing to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges and universities may apply on behalf of their staff members. Nonprofit nonacademic research institutions, private profitmaking organizations, and unaffiliated scientists under special circumstances are also eligible.

Primary Beneficiaries:

Beneficiaries are those individuals performing the research.

(a) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under these programs and applying those percentages to FY 72 program obligations and expenditures.

(b) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

For FY 72 in the International Biological program, 38 grants were made, totaling $9,443,625 in obligations. Grants averaged $248,516 with 74.4 percent of the total funds going to universities and colleges, 22.9 percent to federal laboratories, and 2.7 percent to other agencies. Approximately 106 scientist man-years were supported with these funds as well as 176 graduate students.

In the Global Atmospheric Research program in FY 72, 37 grants were made totaling $2,391,013 in obligations, with an average grant of $64,662. Universities and colleges received 92.4 percent of the funds, while other organizations received 7.6 percent. Approximately 31 scientist man-years were supported in addition to 65 graduate students.

Federal Evaluations/Studies:

There are no specific evaluations for these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

POLAR RESEARCH PROGRAMS (ARCTIC RESEARCH PROGRAM, U.S. ANTARCTIC RESEARCH PROGRAM) (47.001)

Federal Agency:

NSF

Authorizing Legislation:

Office of Management and Budget Circular No. A-51 revised, August 4, 1971; National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875; letter from the Vice President to Director, National Science Foundation, November 7, 1969

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$30,300,000	$30,544,268	$30,544,268[b]
	PSE $ 5,165,599[a]	PSE $ 5,000,000[a]

Program Objectives and Operations:

To fund, manage, and coordinate U.S. research in Antarctica and to serve as lead agency for the extension of Arctic research.

Grant funds may be used for paying costs considered necessary to conduct research or studies. Fees or profits may be paid on contracts.

Primary responsibility for general supervision of all grant activities rests with the grantee institution; the principal investigator is responsible for the scientific work. Institutions are required to share in the cost of each research project. This may be accomplished by a contribution to any cost element in the project, direct or indirect. Cost-sharing does not apply to conferences and symposia, publication, travel, equipment, or logistic support.

Eligible Applicants:

The scientist interested in doing the research normally submits his proposal through his college or university, nonprofit academic research institution, or private profit organization. In special circumstances, support is given to foreign institutions for direct costs only and to unaffiliated scientists. Government agencies are eligible for transfer of funds under this program.

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[a] This estimated figure for funds benefiting colleges and universities was provided by NSF.

[b] NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Primary Beneficiaries:

Beneficiaries are those scientists conducting the research.

Available Program Data:

The Arctic Research program obligated a total of $3,544,029 in FY 72 through a total of 61 grants averaging $58,100. Universities and colleges received 70.0 percent of these funds; industry received 1.5 percent; federal laboratories, 15.6 percent; and other organizations, 12.9 percent. A total of 42 scientist man-years were supported, as well as 76 graduate students.

The U.S. Antarctic Research program, including research ship operations, Department of Defense support, and contract support operations, obligated $27,000,239 in FY 72. A total of 139 research grants averaging $40,669 were awarded, but NSF notes that numbers of grants will decrease in FY 73 and FY 74 due to focusing efforts on fewer but larger research programs. Universities and colleges received 64.5 percent of the FY 72 research monies, with industry receiving 11.2 percent, federal laboratories 16.8 percent, and other organizations and agencies 7.5 percent. A total of 40 scientist man-years and 87 graduate students were supported.

Federal Evaluations/Studies:

There have been no national evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

PUBLIC UNDERSTANDING OF SCIENCE PROGRAM (47.038)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$800,000	$800,000(c)
	PSE $120,000(b)	PSE $120,000(b)

Program Objectives and Operations:

To enhance citizens' knowledge of science and technology in meeting societal problems; dissemination of information about science to the general public; improvement of communications skills in science; cooperative programs with professional societies and other organizations on furthering public understanding of science.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, other direct costs and indirect costs. Institutions are required to share in the cost of each research project and may do this by a contribution to any cost element in the project, direct or indirect.

Eligible Applicants:

Universities, colleges, and independent nonprofit organizations.

(a) The authorization for this program is not separable, according to NSF.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

For FY 72, 15 percent of the grants were distributed to academic institutions. A total of six scientist man-years were supported with these funds.

Federal Evaluations/Studies:

There are no program evaluations available.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

SCIENCE INFORMATION ACTIVITIES (SYSTEM DEVELOPMENT AND IMPROVEMENT, SCIENCE INFORMATION RESEARCH, SCIENCE INFORMATION SERVICES AND PUBLICATIONS) (47.024, 47.025, 47.026)(a)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, P.L. 81-507, amendments through July 18, 1968; 42 U.S.C. 1861-1879, P.L. 90-407; Title IX of P.L. 85-864, amended by P.L. 90-407; Executive Order 10900, January 5, 1961, section 4(d)(11)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$9,800,000	$9,710,922	$9,710,922(c)
	PSE $2,913,277(b)	PSE $2,913,277(b)

Program Objectives and Operations:

To develop and improve information systems and services that are essential to the progress of U.S. science and technology and the exploitation of new scientific knowledge in meeting national needs.

A principal supporting aim is to promote sharing of resources among science information activities, both to achieve major economies and to benefit users in the federal, academic, professional, and industrial communities.

Grant funds may be used for paying costs necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, other direct costs, and indirect costs. Institutions are required to share in the cost of each research project and may do so by contributing to any cost element in the project, direct or indirect.

(a) Three separate listings in the OMB Catalog are combined here since NSF data are unavailable for them separately.

(b) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under these programs and applying those percentages to FY 72 program obligations and expenditures.

(c) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Eligible Applicants:

National scientific societies, nonprofit organizations, colleges, universities, and profitmaking organizations are eligible.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

For FY 72, 30 percent of the grants were distributed to universities and colleges. The remaining money was distributed to industry (2 percent), federal laboratories (4 percent), and other institutions and organizations (64 percent). A total of 47 graduate students were supported, as well as 17 scientist man-years.

In all, 87 grants were distributed for FY 72 averaging $111,620.

Federal Evaluations/Studies:

There are no specific evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

SCIENCE POLICY RESEARCH (47.027)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$750,000	$750,000(b)

Program Objectives and Operations:

To support the analysis of important science policy issues and the development of academic resources for training and research in science planning and policy development.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, other direct costs, and indirect costs. There are no formula or matching requirements.

Eligible Applicants:

Colleges, universities, and nonprofit institutions may submit proposals.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

For FY 72, 100 percent of the funds under this program were distributed to colleges and universities. A total of 30 graduate students were supported, as well as 11 scientist man-years.

(a) Authorizations for this program are not separable, according to NSF.

(b) NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Federal Evaluations/Studies:

There are no national evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

SCIENTIFIC ACTIVITIES (SPECIAL FOREIGN CURRENCY PROGRAM) (47.039)

Federal Agency:

NSF

Authorizing Legislation:

Section 104(b)(3) of the Agricultural Trade Development and Assistance Act of 1954, as amended; 7 U.S.C. 1704(b)(3)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
$3,000,000	$1,999,598 PSE $1,933,914(a)	$1,999,598(b) PSE $1,933,914(a)

Program Objectives and Operations:

To encourage and support scientific cooperation between the United States and participating countries: Burma, Guinea, India, Morocco, Pakistan, Poland, Tunisia, United Arab Republic (Egypt), and Yugoslavia.

The program provides for the utilization of excess currencies by allowing U.S. scientists to conduct research and science education projects. It also provides for international travel of U.S. scientists for scientific meetings, research, teaching, and science planning. There are no formula or matching requirements.

Eligible Applicants:

Those eligible are colleges and universities on behalf of their staff members, individual scientists, nongovernmental scientific international organizations, nonprofit institutions or organizations chartered in the U.S. or in the cooperating country where the cost of the activity will be incurred.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under these programs and applying those percentages to FY 72 program obligations and expenditures.

(b) NSF suggests that, since specific expenditures for these programs are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

This Catalog listing combines two related NSF activities: International Travel Awards and Research Projects.

In FY 72, 108 Travel Awards amounting to $94,937 were obligated, with grants averaging $878. Universities and colleges received 91 percent of these monies, with 2 percent going to federal laboratories, and 7 percent to other agencies and organizations. Four scientist man-years were supported with these funds.

A total of 23 Research Project grants were also awarded in FY 72, amounting to $1,904,661 in obligations. Grants averaged $82,736, with 97 percent of the funds distributed to universities and colleges and the remaining 3 percent to other agencies and organizations. Funds supported 86.2 scientist man-years and 91 graduate students.

Federal Evaluations/Studies:

There are no specific evaluations of these programs.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

SOCIAL SCIENCES RESEARCH PROJECT SUPPORT (47.029)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C., 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
[a]	$22,454,380	$22,454,380[c]
	PSE $18,861,679[b]	PSE $18,861,679[b]

Program Objectives and Operations:

To initiate and support the scientific potential of the U.S. in the social sciences.

Grant funds may be used for paying costs considered necessary to conduct research or studies, such as salaries and wages, expendable equipment and supplies, travel, publication costs, other direct costs, and indirect costs. Institutions are required to share in the cost of each research project and may do so by contributing to any cost element in the project, direct or indirect.

Eligible Applicants:

Colleges and universities may apply on behalf of their staff members. Nonprofit nonacademic research institutions, private profit organizations, and unaffiliated scientists under special circumstances are also eligible.

Primary Beneficiaries:

Beneficiaries are individuals conducting the research.

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[a] The authorization for several different NSF scientific research programs totals $271 million and cannot be separated.

[b] This estimated figure was derived by using NSF's percentage of funds going to universities and colleges under this program and applying that percentage to FY 72 program obligations and expenditures.

[c] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Available Program Data:

In FY 72, 84 percent of the obligated funds went to universities and colleges, with the remaining 16 percent distributed to other organizations. In all, 619 grants, totaling $22,454,380 and averaging $36,275 were made. Graduate students supported under this program numbered 683, with 298 scientist man-years of effort funded.

Federal Evaluations/Studies:

There are no specific evaluations of this program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

UNDERGRADUATE STUDENT DEVELOPMENT (STUDENT-ORIGINATED STUDIES AND UNDERGRADUATE RESEARCH PARTICIPATION PROGRAMS) (47.034)

Federal Agency:

NSF

Authorizing Legislation:

National Science Foundation Act of 1950, amendments through July 18, 1968, P.L. 81-507, 64 Stat. 149; 42 U.S.C. 1861-1875

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$7,694,935[b]	$7,694,935[d]
	PSE $5,756,500[c]	$5,756,500[c]

Program Objectives and Operations:

To provide undergraduate students with direct experience in research and other scholarly studies on problems related to the physical, biological, and social environment.

Grants may be used for both operating costs and participant support for full-time projects. The latter is available in the form of stipends. There are no formula or matching requirements.

Eligible Applicants:

Colleges and universities which grant at least a baccalaureate-level degree may apply.

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[a] The authorization for this program is not separable from the total authorization for NSF science education programs, which equals $99,300,000.

[b] This amount represents total FY 72 obligations for the Talented Student program and includes funds for both high school and undergraduate student projects.

[c] This amount represents only funds for the undergraduate student projects.

[d] NSF suggests that, since specific expenditures for this program are unavailable, FY 72 obligation amounts can be used as a reasonable estimate for FY 72 expenditures.

Primary Beneficiaries:

Prospective participants must be full-time undergraduate students and well-grounded in the sciences.

Available Program Data:

During FY 72, an estimated total of 8,250 students participated in these programs, including both secondary school and undergraduate students. Actually, the National Science Foundation administers three separate programs under this general heading: the Secondary School Student program; the Undergraduate Student program; and Student-Originated Studies. Separate data detailing these programs were not available.

Federal Evaluations/Studies:

No national evaluations of this program have been completed.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

33.

THE SMITHSONIAN INSTITUTION

ACADEMIC APPOINTMENTS (HIGHER EDUCATION AND RESEARCH TRAINING PROGRAMS) (60.002)

Federal Agency:

The Smithsonian Institution

Authorizing Legislation:

Act of Congress approved August 10, 1846; 20 U.S.C. 41 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$474,000	$449,500(a)

Program Objectives and Operations:

To make available to qualified investigators at every educational level the facilities, collections, and professional staff of the Smithsonian.

Appointments are offered annually in the fields of natural history, science and technology, American culture, history, and art to serve as recognized academic experience for predoctoral and postdoctoral scholars as well as undergraduate and graduate students.

Direct research in Smithsonian collections and libraries, professional staff consultation, direction, and instruction, and related seminars and conferences are a part of this activity. A limited number of appropriate stipends, plus certain allowances, are provided. Smithsonian Fellows usually receive $10,000 per year; Smithsonian Predoctoral Fellows, $5,000 per year; graduate and undergraduate students, $80 per week; short-term visitors and seminar lecturers, small awards of $50 upwards. Assistance is provided up to one year, depending upon the type of appointment sought. Other appointments include museum study traineeships. There are no formula and matching requirements. Renewals and extensions are treated like new applications in competitive selections.

Eligible Applicants:

Appointments with fellowship support are available to: (1) postdoctoral scholars and scientists within five years of their Ph.D. to pursue further training in research; (2) doctoral candidates to conduct research for their dissertations, with approval of their university departments; and (3) graduate and undergraduate students as summer research participants under the direction of Smithsonian professional staff members. Individuals are appointed without stipend to the program in museum study for training in museum skills and research techniques. Appointments are available only to students and scholars intending to pursue research and study assignments relating to Smithsonian research and interests of the professional staff. Citizenship is not restricted.

(a) A large number of fellowships spanned FY 72 and FY 73, resulting in unpaid balances in stipends and allowances at beginning of FY 73.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

Under the Academic Appointments program, three kinds of funding activities were sponsored. Pre- and postdoctoral residential fellowships support doctoral candidates conducting dissertation research and junior postdoctorates pursuing advanced research training. In FY 72, a total of 51 such fellows received assistance. Of these, 12 were women and nine were foreign nationals.

Undergraduate or early graduate students may benefit from ten-week residential appointments for research participation and study. In FY 72, out of the 20 students appointed, seven were women and two were foreign nationals.

Short-term visitors who are professionals in academic and museum fields at all levels from advanced undergraduates through senior curators, scholars, and scientists consulting Smithsonian collections and staff totaled 39 in FY 72. Four of these visitors were women. A total of $431,520 was expended in FY 72 directly benefiting students.

Federal Evaluations/Studies:

No evaluations have been undertaken of the Academic Appointments program.

CHESAPEAKE BAY CENTER FOR ENVIRONMENTAL STUDIES (60.004)

Federal Agency:

The Smithsonian Institution

Authorizing Legislation:

Act of Congress approved August 10, 1846; 20 U.S.C. 41 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite[a]	$35,500[a]	$35,500[a]

Program Objectives and Operations:

To provide a demonstration ecological center for research in watershed and estuary control and monitoring. The Center's environmental studies are currently concerned with the development of methods of cooperative action in tideland and estuarine research, pertinent to the future of our fisheries, recreation, and life quality.

The Smithsonian formed a consortium with the John Hopkins University and the University of Maryland for cooperative research at the Center. This is an open-ended consortium that may be joined by other universities. The Center constitutes an ecological baseline against which to compare other areas in this rapidly changing region.

Scientific observation and investigations must be of a nature that will continue to preserve and conserve the natural features. Formula, matching, or length or time phasing requirements for assistance do not apply to this program. Renewals depend on the progress of the project and the additional objectives to be accomplished.

Eligible Applicants:

Pre- and postdoctoral researchers, visiting scientists, and qualified groups who are pursuing specific studies or education programs.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

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[a] FY 73 figures are supplied because the Chesapeake Bay Center had just developed a substantial postsecondary education by that year, although the program is included in the FY 72 OMB catalog. No federal funds went directly to students or schools.

Available Program Data:

Although listed in the FY 72 OMB Catalog, the Chesapeake Bay Center had not developed a substantial postsecondary education program prior to FY 73, when postsecondary work study programs for students were started. These programs involved 35 students, 90 percent of whom were in the 18-24 age bracket, 10 percent of whom were over 24. Minority students were 15 percent of the total. Participating institutions, located in about 16 states, the District of Columbia, and Bristol, England, totaled 24.

Participants in the Adult Workshop program of FY 73 numbered 700. The participants included undergraduate students (10 percent), teachers (25 percent), professional associations (10 percent), civic and social organizations (20 percent), service organizations (5 percent), legislative committees (10 percent), and other groups (20 percent).

Out of this total number of adults, 10 percent were 18-24 years old; 10 percent were 25-34; 60 percent were 35-54; and 20 percent were over 54 years old.

Federal Evaluations/Studies:

No evaluations of these programs have been undertaken.

SMITHSONIAN SPECIAL FOREIGN CURRENCY GRANTS FOR MUSEUM PROGRAMS AND RELATED RESEARCH (SPECIAL FOREIGN CURRENCY PROGRAM) (60.016)

Federal Agency:

The Smithsonian Institution

Authorizing Legislation:

Act of Congress approved August 10, 1846; 20 U.S.C. 41 et seq.; P.L. 480, as amended, annual appropriations of foreign "excess" currencies, the program currently operated under Section 104(b)(3), P.L. 480

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
indefinite	$3,395,558	$2,364,000

Program Objectives and Operations:

To support the research activities of American institutions of higher learning through grants in countries where the U.S. Treasury has determined that the United States holds currencies in excess of its needs as a result of commodity sales under P.L. 480.

Grants in the form of a contract between the Smithsonian and the grantee American institution of higher learning are awarded for basic research in subjects of Smithsonian competence: archeology and related disciplines, systematic and environmental biology, astrophysics and earth sciences, and museum programs. Projects may be binational, with the American grantee institution collaborating with an institution in the host country.

Only legitimate costs of research which can be met with foreign currencies expended in the country where the research is being carried out are authorized. Funds can be used for such things as: International travel of project personnel, domestic transportation within the country where the research is being carried out, salaries of project personnel, food, lodging temporary field shelters (but not permanent structures), and scientific instruments or equipment.

In regard to formula and matching requirements, the grantee must provide any U.S. dollars required to perform the project, since the program has only excess foreign currencies available.

Eligible Applicants:

All American institutions of higher learning (universities, colleges, museums, and research institutions) incorporated in any one of the 50 States or the District of Columbia.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 61 grants were made to 27 institutions in 16 states and the District of Columbia. Twenty of these grantees were universities; one was a foundation; and six were other types of institutions, such as special schools. Higher education outlays for colleges and universities amounted to $2,009,400.

Also, 114 individuals directly benefited from 88 grants awarded for research field trips in archeology, systematic and environmental biology, and astrophysics and earth sciences. A total of 12 grants were made to 12 individuals for studying museum programs. Seven individuals obtained grants to make trips for grant administration purposes, with a total of $354,600 provided in outlays for these individuals.

Federal Evaluations/Studies:

No evaluations of this program are available.

VISITING RESEARCH APPOINTMENTS IN ASTROPHYSICS, GEODESY, METEORITICS AND SPACE SCIENCES (60.019)

Federal Agency:

The Smithsonian Institution

Authorizing Legislation:

Act of Congress approved August 10, 1846; 20 U.S.C. 41 et seq.

FY 72 Authorization:	FY 72 Obl[illegible]tions:	FY 72 Expenditures (Outlays):
Indefinite	$131,655	$131,655

Program Objectives and Operations:

Provides to qualified individuals an opportunity to conduct research in collaboration with staff members and utilize the facilities of the Smithsonian Astrophysical Observatory in Cambridge, Massachusetts.

Academic appointments, including use of equipment, are available to qualified researchers. Several observatories and radio telescopes are available. There are no formula or matching requirements. Appointments are generally for a period of one year.

Eligible Applicants:

Qualified students and scholars--citizenship unrestricted.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

FY 72 support went to five postdoctorate researchers for research at the Smithsonian Astrophysical Observatory. Predoctoral fellowships went to seven doctoral candidates to assist their pursuits in their doctorate programs, including dissertation research. Eight undergraduate and graduate students received support for summer-long research participation.

Funds assisting individuals from schools of higher education totaled $104,018.

Federal Evaluations/Studies:

No evaluations have been made of this program.

WOODROW WILSON INTERNATIONAL CENTER FOR SCHOLARS--FELLOWSHIPS AND GUEST SCHOLAR PROGRAMS (60.020)

Federal Agency:

The Smithsonian Institution

Authorizing Legislation:

Act of Congress approved October 24, 1968, P.L. 90-637, 82 Stat. 1356; 20 U.S.C. 41 et seq.

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
Indefinite	$820,000	$872,000

Program Objectives and Operations:

To further Woodrow Wilson's ideals. Funds include stipends to help meet previous years' salary rate and travel expenses for fellows. For participants in the guest scholar program, accommodations and facilities are available for short-term use.

Eligible Applicants:

Up to 4[illegible] scholars, approximately half from the United States and half from the other countries, normally limited to established scholars at the post-doctoral level (or equivalent). There will be no higher degree requirements for nonadacemic fellows, but professional standing, writings, honors, and advanced degrees will be considered.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, 48 postdoctoral fellows received assistance under the Center's program. Academic professionals from academic institutions participating in the program totaled 25. A total of 31 fellows were U.S. nationals, and 17 were foreign nationals.

Federal Evaluations/Studies:

No evaluations have been undertaken of this program.

VETERANS ADMINISTRATION (VA)

BIOMEDICAL RESEARCH--CAREER DEVELOPMENT PROGRAMS[a]

Federal Agency:

VA: Department of Medicine and Surgery

Authorizing Legislation:

38 U.S.C. 216, as amended by P.L. 85-857

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(b)	$7,535,000[c]	$7,226,000[c]

Program Objectives and Operations:

To provide well-qualified health professionals (dentists, physicians, psychologists, etc.) the opportunities to learn and to develop their careers in clinical medicine, research, and education.

Eligible Applicants:

Health professionals (dentists, physicians, psychologists, etc.) who have completed at least three years of postmedical training and who have a background and future as medical researchers. Participation in the lower program levels is not a prerequisite for acceptance at higher levels.

Primary Beneficiaries:

Participating health professionals and patients at VA hospitals.

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[a] For clarity, the OMB Catalog listing for Biomedical Research (#64.001) has been divided into two separate entries in this compilation: Biomedical Research--Contracts to Universities; and Biomedical Research--Career Development.

[b] Rather than an authorization, the VA receives an annual appropriation from Congress.

[c] Obligations and expenditures both include some funds utilized for the salaries and research expenses of Senior Medical Investigators which could not be separated from postsecondary funds. (See note d.)

Available Program Data:

The program consists of four[d] levels of research and teaching positions, so that health professionals with either proven or promised ability in medical research may enter the program at a level appropriate to previous training and experience.

The lowest level is Research and Education Associate which is considered a training position, since 75 percent of the Associate's time is spent in educational and training research and the remainder in appropriate clinical or teaching activities. The remaining three levels are intended for physicians who have proved their aptitude for research; the program frees such investigators to spend a majority of their professional time in research or related activities.

All participants receive both a salary and a specified research allowance commensurate with each program level.

The Career Development Program in FY 72 provided the opportunity for approximately 210 individuals to develop their research abilities. By levels, in that year, there were 24 Medical Investigators on duty, 75 Clinical Investigators, and 115 Research and Education Associates. These persons worked at VA hospitals throughout the nation researching numerous subjects in a variety of medical fields including dentistry, surgery, and psychology, as well as in such specialized fields as rheumatology, nephrology, and gastroenterology.

A complete listing of all participants, their research speciality, and hospital may be found in the annual report to Congress entitled Medical Research in the Veterans Administration, available from the VA.

Federal Evaluations/Studies:

An article entitled "The Veterans Administration Clinical Investigator Program -- A 12 Year Follow-Up" was published in the Journal of the American Medical Association, January 26, 1970, Vol. 211.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

40, 127, 128.

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[d] Discussion of the highest level, that of Senior Medical Investigator, is not included in this entry since appointment is open only to VA researchers and physicians and consequently this is considered an in-service position.

BIOMEDICAL RESEARCH--CONTRACTS TO UNIVERSITIES[a] (64.001)

Federal Agency:

VA: Department of Medicine and Surgery

Authorizing Legislation:

38 U.S.C. 216, as amended by P.L. 85-857

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(b)	$154,597	$156,252

Program Objectives and Operations:

To provide the best available medical care for the veteran patient through the support of research.

Although the vast majority of its biomedical research is conducted at its own hospitals and clinics, the VA each year lets out a limited number of research contracts to other public and private research centers or health institutes. Such institutes submit applications or bids to the VA Research Service, which decides the prospective contractor who appears most qualified to conduct the desired studies.

Eligible Applicants:

Institutions of higher education.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

Available Program Data:

In FY 72, eight universities held research contracts under this program: Georgetown University; Johns Hopkins University; the State University of New York; University of Michigan; University of Minnesota; University of

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[a] For clarity, the OMB Catalog listing for Biomedical Research (#64.001) has been divided into two separate entries in this compilation: Biomedical Research--Contracts to Universities; and Biomedical Research--Career Development.

[b] Rather than an authorization, the VA receives an annual appropriation from Congress.

New Mexico; University of North Carolina; and Yale University. Statistical services and data analysis were obtained by contract in support of VA intramural cooperative research studies in lung cancer chemotherapy and hypertension, among others.

Federal Evaluations/Studies:

No national studies have been completed relating to this program.

EDUCATION AND TRAINING OF HEALTH SERVICE PERSONNEL (RESIDENCY AND OTHER TRAINING) (64.003)

Federal Agency:

VA: Department of Medicine and Surgery

Authorizing Legislation:

"Medical Omnibus" Law--Veterans Hospitalization and Medical Services Modernization Amendments of 1966, Title I, Section 101, 38 U.S.C 4101(b); 38 U.S.C. 4114(b)

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	\$69,623,000 (b)	\$69,623,000 (b)

Program Objectives and Operations:

To provide health services training in VA hospitals and clinics in cooperation with medical schools and institutions of higher learning, medical centers, hospitals, and other public or nonprofit bodies.

Veterans hospitals and clinics provide the laboratories, patient population, and experienced clinicians necessary for health service training courses. Most students or trainees are enrolled in some formal health service training course at an affiliated institution and receive their clinical or practical training at the VA hospitals. Stipends may be awarded to students by the VA.

Eligible Applicant:

Primarily, students enrolled in accredited health training courses at affiliated institutions of higher learning. In a few disciplines, the VA hospital itself serves as the "school" in which trainees are enrolled. All stipends are awarded directly to the students.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Rather than an authorization, the VA receives an annual appropriation from Congress.

(b) According to the VA, these are allocations awarded to health trainees in the form of stipends in FY 72. The figures do not include funds spent for in-service training.

Available Program Data:

The VA in FY 72 assisted in the health service training of approximately 56,197 persons having no prior commitment to the VA. Of that number, 24,121 were residents, interns, or other advanced medical or dental trainees, while another 32,076 individuals received training in such fields as hospital library methods, biomedical instrumentation, nursing, podiatry, and nuclear medicine; and 68 persons received training in hospital administration techniques.

Although most student trainees receive no financial aid, over $55,000,000 in stipends was awarded to medical and dental residents and interns, and over $10,000,000 was awarded to individuals receiving other types of medical health training (not inlcuding any type of in-service training) under VA auspices.

Federal Evaluations/Studies:

These programs are continually evaluated at all agency levels by national accrediting bodies, according to the VA.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

126, 127.

EXCHANGE OF MEDICAL INFORMATION (64.004)

Federal Agency:

VA: Department of Medicine and Surgery

Authorizing Legislation:

38 U.S.C 5051-5057

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$1,991,000	$2,244,000

Program Objectives and Operations:

To strengthen VA hospitals not affiliated with medical schools and/or located far from medical teaching centers, as well as to foster cooperation and communication among all members of the medical profession.

The VA promotes innovative projects in exchange of medical information either through grants to non-VA hospitals or through pilot programs conducted at its own hospitals. The intent of these projects is to facilitate health care both at VA hospitals and at other public and private health institutions through improved communications among all participants.

Eligible Applicants:

Medical schools, hospitals, research centers, and VA installations. (All VA installations are involved in the EMI program either as "core" programs from which information flows, or as recipients of this information.)

Primary Beneficiaries:

Personnel of participating health institutions.

Available Program Data:

During FY 72, the Exchange of Medical Information provided funds for 17 major pilot projects at institutions throughout the nation. Typically, these projects involved closed-circuit television systems, a teleconsultation and telemedicine system, a continuing education project in dentistry, a diagnostic network in nuclear medicine, and the development of multimedia self-instructional materials for nursing assistants. In addition, funds were provided for the production of teaching films in dentistry and medical techniques and for a telephone-accessible taped lecture series, which were utilized by large numbers of VA hospitals in FY 72.

(a) Rather than an authorization, the Veterans Administration receives an annual appropriation from Congress.

Federal Evaluations/Studies:

There is continuing evaluation of all EMI projects by an agency advisory committee under legislative direction, according to the VA.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

41, 127.

PROSTHETICS RESEARCH (64.006)

Federal Agency:

VA: Department of Medicine and Surgery

Authorizing Legislation:

38 U.S.C. 216

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$2,030,000	$2,030,000

Program Objectives and Operations:

To develop new and improved prosthetic devices, sensory aids, and related devices for the primary benefit of disabled veterans, and to train future prosthetists and orthotists for service both in VA and non-VA institutions.

The VA contracts with universities, public and private research groups, and other health institutes to investigate and develop specified prosthetic devices. In addition, prosthetic and orthotic training is financed by direct contracts with three universities which sponsor postgraduate courses in prosthetic methods.

Eligible Applicants:

Physicians, state or local health agencies, research organizations, universities, or rehabilitation centers.

Primary Beneficiaries:

Prosthetic and orthotic researchers or trainees.

Available Program Data:

In FY 72, the VA contracted with 15 universities to conduct studies and develop or improve various types of prosthetic devices and sensory aids for the blind and deaf. Contracts to universities for such research amounted to approximately $674,000 in that year. The VA also granted the University of California at Los Angeles, New York University, and Northwestern University a combined total of approximately $400,000 to aid in the conduct of postgraduate courses which provided prosthetic or orthotic training for nearly 1,000 VA and non-VA health personnel.

(a) Rather than an authorization, the Veterans Administration receives an annual appropriation from Congress.

Federal Evaluations/Studies:

A study is currenly underway that will review the past and present operation of training programs for orthotic surgeons, orthotists, prosthetists, and rehabilitation counselors. The study, conducted by the Committee on Prosthetic Research and Demonstration of the National Academy of Sciences, is due to be completed within FY 74, and will be presented as a series of recommendations for the immediate future and for long-term planning of training programs and facilities.

PENSION AND COMPENSATION TO VETERANS' WIDOWS AND CHILDREN (64.102, 64.105)

Federal Agency:

VA: Department of Veterans Benefits

Authorizing Legislation:

38 U.S.C. 541, 411, 413, 414

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	(a)	(a)

Program Objectives and Operations:

To provide partial means of support for needy widows and children of deceased wartime veterans.

Dependency and Indemnity Compensation (DIC) is for survivlors of veterans whose deaths were related to military service, and is payable to widows who remain unmarried and to children over age 18 who are attending school. However, since such children are also eiligible for War Orphans and Widows Educational Assistance, they must choose which benefit they will receive although widows may receive both benefits.

Pension benefits are for the survivors of veterans of wartime service whose deaths were not related to military service. These pensions make available additional payable benefits for children between 18 and 25 attending approved schools.

Eligible Applicants:

For DIC payments, surviving orphans must not be receiving War Orphans and Widows Educational Assistance. The pension parogram has income requirements which make ineligible widows with one dependent earning over $2,600, widows with one or more children earning more than $3,800, and if there is no eligible widow, any child whose unearned income exceeds $2,000.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

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[a] According to the VA, it is impossible to distinguish payments made only to student dependents over age 18. In FY 72, total costs for the Survivors Pensions were approximately $1,065,500,000, and for Widows and Dependents Compensation approximately $700,000,000.

Available Program Data:

The majority of students receiving payments are pension beneficiaries, who receive (directly or indirectly) monthly benefits which presently are $17 for one student dependent and an additional $17 for each additional dependent in the family.

No additional data are available from the VA except for the number of student beneficiaries on the pension and compensation rolls at the end of four months in FY 72. (Figures are noncumulative.)

Number of students between the ages of 18 and 23 for whom compensation and pension benefits were paid[b]

At the end of:

	Sept. '71	Dec. '71	March '72	June '72
Compensation Beneficiaries	3,313	5,401	6,495	6,202
Pension Beneficiaries	15,320	63,021	72,920	62,298
Total	18,633	68,422	79,415	68,500

Federal Evaluation/Studies:

No evaluations or studies of student beneficiaries have been done concerning this program.

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[b] Since the type or level of student status does not affect eligibility, the VA does not distinguish between secondary and postsecondary students. Also, the number of students (18-23) for whom monthly compensation benefits are paid under the Widows Compensation Program is not indicative of the total number of such compensation eligibles, as the majority receive aid under the War Orphans and Widows Educational Benefits of the present G.I. Bill. (See p. 723).

VETERANS EDUCATIONAL ASSISTANCE (G.I. BILL) (64.111)

Federal Agency:

VA: Department of Veterans Benefits

Authorizing Legislation:

38 U.S.C. 1651

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$1,818,250,000(b) $1,801,410,000(b)	$1,801,085,000(b) $1,784,404,000(b)

Program Objectives and Operations:

To make service in the Armed Forces more attractive by extending benefits of a higher education to qualified young persons who might not otherwise be able to afford such an education; and to restore lost educational opportunities to those whose education was interrupted by active duty after January 1, 1955.

The government provides monthly payments to veterans who enroll in any institution of postsecondary education that will accept them as students or trainees. The amount of the monthly payments depends upon the status of the student-trainee (full- or part-time), and upon the number of dependents. In addition, the VA runs a full-time program, Project Outreach, which seeks to aid the veteran to reenter civilian society by promoting on-job training.

Eligible Applicants:

Any veteran who honorably served, or who is currently serving on active duty, for more than 180 days, any part of which occurred after January 31, 1955.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Rather than an authorization, the VA receives annual appropriations for its Readjustment Benefits budget.

(b) As the VA keeps budget figures for separate programs only in terms of cost, both obligation and expenditure amounts are estimates supplied by the VA. Lower figures represent adjusted approximations of the funds utilized only for the postsecondary education in FY 72.

Available Program Data:

Over 1,824,000 veterans and servicemen received educational assistance totaling an estimated \$1,773,000,000(c) from the VA in FY 72. Approximately 1,079,000 trained at the college level, 598,000 received some type of vocational-technical training other than secondary-level education, and another 161,500 trained in on-job programs. The total number trained in FY 72 represents a 17.2 percent increase over FY 71 and makes the program in FY 72 the most extensive since its inception in 1966. No detailed data for FY 72 are available as to the type of veteran that received benefits in that year.

Federal Evaluations/Studies:

A complete independent evaluation requested by Congress now being conducted by the Educational Testing Service for the VA will compare the educational benefits available under the present G.I. Bill (in effect since 1966) to those of the World War II and Korean War G.I. Bills. In addition, the study will evaluate the adequacy of the present benefits in meeting the particular needs of the Vietnam War veterans, as well as the assistance available to disabled veterans and dependents of deceased or disabled servicemen, or prisoners of war.

There have been several more limited studies of the educational benefits under the present Bill. A 1972 report by the American Council on Education, The Vietnam Era Veteran Enters College, presents a portrait of the veteran freshman based on its annual weighted survey of college freshmen. The report separates the socioeconomic material and opinions of veterans in its sample and compares them with those of nonveterans in the same sample. No conclusions are drawn except that more facts are needed.

Louis Harris Associates has also conducted a poll for the VA, one part of which asked veterans to evaluate services provided by the VA. Most veterans queried gave generally favorable responses to the educational benefits programs, although there were some complaints that payments were inadequate.

Two other studies by veterans groups (the Veterans of Canisius College and the National Association of Collegiate Veterans) have criticized the educational benefits system for limited specified inequities as part of the proposals for changes in the present G.I. Bill.

A recent Nader Report, entitled Troubled Peace, examines the Vietnam veteran and the VA. Although the report does not present a systematic study of education benefits, it concludes that, despite some wastefulness and fraudulent expenditures, the program "has been an extremely worthwhile . . . the best, without doubt, available to Vietnam veterans."(d)

(c) These figures are approximations of recipients of, and funds actually paid for, educational assistance beyond the secondary level.

(d) Paul Starr, Troubled Peace, (Washington; Center for Study of Responsive Law, 1973), p. ix-66 (preliminary draft).

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

6, 14, 26, 30, 36, 123, 124, 125.

VOCATIONAL REHABILITATION FOR DISABLED VETERANS (G.I. BILL, CHAPTER 31) (64.116)

Federal Agency:

VA: Department of Veterans Benefits

Authorizing Legislation:

38 U.S.C. 1502

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
[(a)]	$65,042,000[(b)]	$64,658,000[(b)]

Program Objectives and Operations:

To train veterans for the purpose of restoring employability to an extent consistent with a service-connected disability.

VA personnel counsel disabled veterans on rehabilitation opportunities and continue to advise and supervise during the training period, usually limited to four years or less. During that time, the program provides for the entire cost of books, tuition, fees, and training supplies, as well as a subsistence allowance (in addition to the disability compensation) that continues for two months beyond the training period. Noninterest-bearing loans, not to exceed $200, are also available for veterans in the program.

Eligible Applicants:

Veterans of World War II and later service who, as a result of a service-connected compensable disability, are determined to be in need of vocational rehabilitation to overcome their handicap. Usually, training must be accomplished within nine years of the date of discharge from service, although in FY 72 about 4 percent of the program participants had been injured during World War II or the Korean War.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Rather than an authorization, the VA receives annual appropriations for its Readjustment Benefits budget.

(b) As the VA keeps budget figures for separate programs only in terms of cost, both obligation and expenditure amounts are estimates furnished by the VA. Both figures given include small amounts spent on secondary education which were inseparable from the rest of the data.

Available Program Data:

In FY 72, 31,636 disabled veterans recieved training under the rehabilitation program, almost 70 percent at the college level. Benefits were also provided for veterans receiving vocation-technical and on-job training and for those participating in the cooperative farm program. The cost of all assistance in FY 72 was approximately $65,000,000, of which $42,000,000 was given in the form of monthly grants and the remainder was paid for special services and supplies.

Federal Evaluation/Studies:

No evaluations dealing specifically with this section of the G.I. Bill are presently available. A survey done by Louis Harris Associates in 1971 deals briefly with some of the problems that disabled veterans had experienced under the vocational rehabilitation program. Another survey, entitled "Troubled Peace", is a Nader Report that also looks at this program as one part of a study of the Vietnam veteran and the VA. Finally, an independent evaluation of educational benefits available under the present G.I. Bill, being done by the Educational Testing Service for the VA, will also contain a section on the disabled veterans vocational rehabilitation program.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

26, 36, 123, 125.

WAR ORPHANS AND WIDOWS EDUCATIONAL ASSISTANCE (G.I. BILL, CHAPTER 35) (64.117)

Federal Agency:

VA: Department of Veterans Benefits

Authorizing Legislation:

38 U.S.C. 1710

FY 72 Authorization:	FY 72 Obligations:	FY 72 Expenditures (Outlays):
(a)	$76,877,000(b)	$76,152,000(b)

Program Objectives and Operations:

To provide partial support for education to wives, widows, sons, and daughters of deceased or disabled veterans and servicemen who are missing in action. Monthly payments for up to 36 months are provided for any qualified wife, widow, son, or daughter who applies for such aid (for wives and widows, education usually must be completed within eight years of the date the veteran or serviceman was listed as deceased, disabled, or missing). Marriage will not bar children from receiving benefits, but remarriage of a widow will terminate payments for her support unless the remarriage is terminated by death or divorce.

Eligible Applicants:

The wives, widows, and children (between the ages of 18 and 26 for the latter group) of veterans who died or were permanently and totally disabled due to service in the Armed Forces, or of servicemen who have been listed as missing in action or as a prisoner of war for more than 90 days.

Primary Beneficiaries:

Same as those noted above as eligible applicants.

(a) Rather than an authorization, the VA receives annual appropriations for its Readjustment Benefits budget.

(b) As the VA keeps budget figures for separate programs only in terms of cost, both obligation and expenditure amounts are estimates furnished by the VA. Both figures given include small amounts spent on secondary education which were inseparable from the rest of the data.

Available Program Data:

In FY 72, 9,560 wives or widows and 54,996 sons and daughters received educational assistance. College was the chosen type of training for 68 percent of the wives or widows, and 90 percent of the sons and daughters, while smaller numbers selected training programs at technical or vocational schools.

Federal Evaluations/Studies:

No evaluations dealing specifically with this section of the G.I. Bill have been done. An independent report, mandated by Congress and being done for the VA by Educational Testing Service, will contain a section evaluating benefits under the present G.I. Bill.

Information Sources:

References used for this program description are listed in the bibliography and are numbered as follows:

123, 125.

APPENDIX A.

APPENDIX A

Programs Included in This Listing Which Do Not Appear in the FY 73 Edition of the Catalog

FY 72 OMB Catalog #	Agency	Program Title
12.001	Department of Defense	Machine Tool Loan to Educational Institutions
13.101	Department of Health, Education, and Welfare	Product Safety Research Grants
13.104	"	Food Research Training Grants
13.106	"	Radiological Health Training Grants
13.202	"	Disease Control - Research Grants
13.203	"	Disease Control - Training Public Health Workers
13.208	"	Comprehensive Health Planning - Training, Studies, and Demonstrations
13.214	"	Emergency Health - Community Preparedness
13.218	"	Health Care of Children and Youth
13.225	"	Health Services Research and Development
13.230	"	Intensive Infant Care Projects
13.234	"	Maternal and Infant Care Projects
13.248	"	Disease Control - Nutrition
13.264	"	Occupational Health - Special Fellowships
13.265	"	Occupational Health - Demonstration Grants
13.300	"	Allergy and Infectious Diseases - Fellowships & Research Career Development Awards
13.302	"	Allergy and Infectious Diseases - Training Grants
13.303	"	Allied Health Professions - Traineeship Grants for Advanced Training

FY 72 OMB Catalog #	Agency	Program Title
13.305	Department of Health, Education, and Welfare	Allied Health Professions - Special Project Grants
13.307	"	Arthritis and Metabolic Diseases - Fellowships
13.308	"	Arthritis and Metabolic Diseases - Graduate Training Grants
13.310	"	Biomedical Sciences Support Grants
13.311	"	Cancer - Clinical Training
13.313	"	Cancer - Research Fellowships
13.315	"	Cancer - Research Career Development
13.316	"	Child Health & Human Development - Fellowships
13.318	"	Child Health & Human Development - Training Grants
13.324	"	Dental Research - Fellowships
13.325	"	Dental Research - Grants
13.326	"	Dental Research - Training Grants
13.330	"	Eye Research - Fellowships
13.332	"	Eye Research - Training Grants
13.334	"	General Medical Sciences - Fellowships
13.336	"	General Medical Sciences - Training Grants
13.338	"	Graduate Training in Public Health - Project Grants
13.340	"	Health Professions Teaching Facilities - Construction Grants
13.341	"	Health Professions - Scholarships
13.344	"	Heart and Lung Research - Fellowships
13.345	"	Heart and Lung Research - Graduate Training Grants

FY 72 OMB Catalog #	Agency	Program Title
13.352	Department of Health, Education, and Welfare	Medical Library Assistance - Special Scientific Project Grants
13.353	"	Medical Library Assistance - Training Grants
13.354	"	Neurological Diseases and Stroke - Fellowships
13.355	"	Neurological Diseases and Stroke - Graduate Training Grants
13.358	"	Professional Nurse Traineeships
13.360	"	Special Predoctoral and Postdoctoral Fellowships in Nursing Research
13.361	"	Nursing Research Project Grants
13.362	"	Nurse Scientist Graduate Training Grants
13.363	"	Nursing Scholarships
13.366	"	Professional Public Health Personnel - Traineeships
13.367	"	Animal Resources - Fellowships
13.368	"	Animal Resources - Training Grants
13.370	"	Schools of Public Health - Grants
13.372	"	Cancer - Leukemia Research Support
13.373	"	Cancer - Graduate Training
13.377	"	Allied Health Professions - Special Improvement Grants
13.382	"	Heart and Lung Research - Pulmonary Academic Awards
13.385	"	Health Professions Teaching Personnel - Training, Traineeships, and Fellowships
13.386	"	Nursing Capitation Grants
13.387	"	Nursing Professions - Talent Utilization

FY 72 OMB Catalog #	Agency	Program Title
13.388	Department of Health, Education, and Welfare	Nursing Schools - Financial Distress Grants
13.406	"	College Library Resources
13.408	"	Construction of Public Libraries
13.411	"	Educational Research & Development Centers
13.412	"	Educational Research & Development - Regional Educational Laboratories
13.417	"	Educational Classroom Personnel Training - Special Education
13.418	"	Educational Opportunity Grants
13.420	"	Drug Abuse Prevention
13.422	"	Educational Research and Development - General Education (Project) Research
13.424	"	Educational Research Training
13.425	"	Educational Staff Training - School Personnel Utilization
13.434	"	Foreign Language and Area Studies - Fellowships
13.435	"	Foreign Language and Area Studies - Centers
13.436	"	Foreign Language and Area Studies - Research
13.457	"	Higher Education Academic Facilities Construction - Interest Subsidization
13.458	"	Higher Education Academic Facilities Construction - Public and Private Colleges and Universities
13.459	"	Higher Education Academic Facilities Construction - Public Community Colleges and Technical Institutes
13.461	"	Higher Education Personnel Development - Institutes and Short-term Training

FY 72 OMB Catalog #	Agency	Program Title
13.464	Department of Health, Education, and Welfare	Library Services - Grants for Public Libraries
13.465	"	Library Services - Inter-Library Cooperation
13.468	"	Library Training Grants
13.469	"	National Defense Education Act - Loans to Institutions
13.475	"	Research and Development - Library Research and Demonstration
13.476	"	Research and Development - Regional Research
13.490	"	Training of Teacher Trainers
13.491	"	University Community Service - Grants to States
13.503	"	Vocational Education Personnel Development Awards
13.504	"	Vocational Education Personnel Development - Professional Personnel Development for States
13.507	"	Teacher Training In Developing Institutions
13.508	"	Educational Personnel Development - Media Specialists
13.509	"	Educational Personnel Development - Pupil Personnel Specialists
13.513	"	Educational Dissemination
13.514	"	Educational Personnel Development - Educational Leadership
13.518	"	Higher Education Instructional Equipment
13.521	"	Experimental Schools
13.522	"	Environmental Education

FY 72 OMB Catalog #	Agency	Program Title
13.758	Department of Health, Education, and Welfare	Comprehensive Social and Rehabilitation Training
14.100	Department of Housing and Urban Development	Housing for Educational Institutions
14.202	"	Community Development Training Grants
14.217	"	Urban Studies Fellowships
14.300	"	Model Cities Supplemental Grants
14.504	"	Urban Planning Research and Demonstration
17.204	Department of Labor	Concentrated Employment Program
17.215	"	Manpower Development and Training - Institutional Training
24.006	Atomic Energy Commission	Nuclear Education and Training - Faculty-Student Experiments
24.008	"	Nuclear Education and Training - Faculty Workshops .
24.009	"	Nuclear Education and Training - Honors Program for Senior Science Majors
24.031	"	Nuclear Materials Safeguards Training
47.010	National Science Foundation	Graduate Instructional Program Development
47.027	"	Science Policy Research
66.301	Environmental Protection Agency	Solid Waste Planning Grants
66.303	"	Solid Waste Training Grants
66.406	"	Water Pollution Control - Research Fellowships

APPENDIX B.

APPENDIX B

Postsecondary Programs Authorized Under The Education Amendments of 1972 and First Funded in FY 1973*

(selected)

--Basic Educational Opportunity Grants

--Fund for the Improvement of Postsecondary Education

--Land Grant Payments to the College of the Virgin Islands and the University of Guam

--Veterans Cost of Instruction

--Allen J. Ellender Fellowships (Senate Joint Resolution 265)

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*Not included in this compilation

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